

Supplier incentives to invest in buyer promoted sustainability activities in the supply chain

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Abstract

Using a combined conceptual and single case-based research methodology, we explore the process connecting a buyers attempt to transfer its sustainability requirements with its suppliers' willingness to participate. We conclude that buyer promoted sustainability practices in the supply chain can be understood as multiple decision problems. The case illustrate how accounting devices play major roles in resolving these decision problems, and how decision criteria apparently unconnected to the sustainability issue affect the outcome of the sustainability transferral process in the supply chain.

Keywords: Sustainability, Supply chain, Incentives

Introduction

Sustainability in the supply chain is a topic growing in importance for practitioners as well as for research. Only a few contributions however have explored how buyers' practices to transfer sustainability requirements to their suppliers are structured and how suppliers are incentivised to participate in such practices.

When a firm adopts sustainable principles, it accepts that these principles hold it accountable for the social and environmental impact arising along its supply chain. A sustainability initiative cannot improve one firm's efficiency and performance individually because the social and environmental performance of the supply chain can be achieved only through the interaction of various activities undertaken by each player. In principle, if one member of the chain fails to act according to the agreed upon sustainability initiative, the hole chain potentially will suffer with the potential implication of consumer sanctions, negative press, capital loss, government interventions and damaged brands (Petersen and Andersen, 2006). As a consequence the involvement and participation of suppliers in sustainability assurance initiatives in the supply chain is of fundamental importance. However since not all members of the supply chain can be assumed to be equally enthusiastic about added sustainability requirements, one of the major challenges faced by buyers when implementing sustainability in their supply chains is the potential unwillingness or reluctance of their suppliers to invest financially or mentally in such initiatives. As a result, suppliers are an inherent source of sustainability risk to the supply chain, and if not managed properly they can be a bottleneck in pursuing the goal of a more sustainable supply chain. Combining this with the inherent difficulties of enforce social and environmental requirements across a global supply chain due to the geographically-, economically-,

legally-, culturally- and politically- separation of the involved firms (Pedersen and Andersen, 2006, p. 228) highlights the importance of research exploring sustainability transferral processes and supplier incentives to participate in them.

We define buyer promoted sustainability activities in the supply chain as a buyers intentions to, and actual observable practices that, integrate social and environmental issues into its supply chain management routines in order to improve the social and environmental performance of its supply chain. The objective for such practices is how the buyer can secure that its requirements on sustainability are transferred to its suppliers. The general idea is that by using a combination of different managerial devices or mechanism ordered in a certain sequence, the focal buying firm's social and environmental norms and requirements will be known to and practices by the supplier and in turn by the suppliers of the supplier and ultimately by the wider supply chain.

Almost no research has addressed incentives for supplier participation in sustainability initiatives managed by buying firms (Baden et al., 2009; Lee, 2008). The work of Lee (2008) and Baden et al. (2009) begins to fill this void, by explicitly examining drivers for the participation of small and medium-sized suppliers in green supply chain initiatives and the effect of buyer pressure on suppliers in SMEs to demonstrate CSR practices.

We are interested in following the conscious or unconscious construction of the mechanisms that help motivate or de-motivate suppliers to act according to, or against buyer-promoted sustainability initiatives. Such an examination implies following the chain of activity starting in the focal buying firm, when this firm engage in the structuring of such practices and ending at the supplier as an influence attempt. We formulate the following research question: *How can we understand the process connecting a buyers attempt to transfer its sustainability requirements with its suppliers' willingness to participate?*

In the next paragraph we present our research methodology. In section three, we briefly discuss existing literature on sustainability practices in the supply chain. Then we present and analyse EAMs sustainability transferral framework and how EAM interacts with its suppliers to transfer its sustainability requirements. We will analyse the case and suggest a conceptual process model for the transferral of sustainability in the supply chain. Finally we conclude and provide suggestions for future research.

Research methodology

Using a combined conceptual and case based research methodology, we explore a buyer in the process of developing sustainability transferral mechanisms and implementing sustainability requirements in its supply chain. EAM (a fictional name to preserve firm anonymity) a mitt sized European firm with an annual turnover of around 750 million Euros and more than 5000 employees worldwide, develops manufactures and sells electronic appliances and has recently developed a code of conduct and a set of procedures to identify risk and promote ethical behaviour at its suppliers. We observe how these activities and mechanisms are designed in order for them to be able to transfer sustainability requirements to all involved suppliers. We then explore the interaction between EAM and their suppliers, and how suppliers respond to the code of conduct and the procedures communicated to and enforced upon them.

Our goal is not to develop new theory, but to describe accurately an instance of a process connecting a buyers attempt to transfer its sustainability requirements with its suppliers' willingness to participate, provide ramifications and ultimately guidelines for managers. A case study approach matches well with the "how" research questions in this research (Yin, 2003) and our conceptual research methods based on descriptive,

empirical investigation can further significantly increase the external validity of our research conclusions and their corresponding relevance to managers (Meredith, 1993, p. 2). The results from our case cannot be subject to statistical generalisation, but it can be used as a basis for generating theoretical constructs and propositions (Eisenhardt, 1989).

In order to collect data on the buyers' sustainability transferring process the researcher initially interviewed managers in the purchasing organization. Interviews were structured informally and as semi structured open-ended type interviews (Kvale, 2007). It was important to be as open as possible and not restrict collected data. At the time, the researcher entered in the organization the buyers sustainability transferring process had not been finalised and internal workshops were running. To learn about internal actor's views, expectations and fears on the new sustainability transferring process the researcher participated as observer in these workshops. Also, at this stage written data in the form of the code of conduct document, procedure descriptions, corrections to the code of conduct and procedures were collected.

In order to collect data on the actual transferral processes, buyer-supplier interaction and supplier's reactions we used several different sources of data. Our selection of suppliers was based on where transferral processes and interaction was taking place that could be observed. When possible the researcher participated in meetings between the buyer and its suppliers. In other cases buyers purchasing representatives acted as observers and collected data in the form of notes or tape recordings. The researcher interviewed EAM representatives in order to learn about their views on the specific supplier relationship and how suppliers reacted to the imposed social and environmental requirements. Written data was accessed by the researcher in the form of contracts, notes from meetings, e-mail exchanges, audit reports and corrective action project plans.

Sustainability practices in the supply chain

Research on sustainability, CSR or environmental/green supply chain management is diverse, covering areas such as: The definition of the concepts (Carter and Jennings, 2002, 2004; Carter and Rogers, 2008; Krause et al., 2009), drivers of sustainability practices (Hall, 2000; Carter and Jennings, 2002, 2004; Preuss 2005; González-Benito et al., 2006), the sustainability practices themselves (Min and Galle, 2001; Pedersen and Andersen, 2006; Vasileiou and Morris, 2006; Andersen and Skjoett-Larsen, 2009; Pagell and Wu, 2009), and the consequences and performance implications of sustainability practices (Montabon et al., 2000; Carter, 2005; Rao and Holt, 2005; Markley and Davis, 2007; Cruz, 2009; Kaynak and Montiel, 2009). In this research we are narrowly interested in literature discussing buyer practices and buyer-supplier interaction on social and environmental requirements.

In the literature, sustainability is defined as a broad term encompassing an economic, a social and an environmental dimension (Barbier, 1987; Gladwin et al., 1995, Elkington, 1998). As a consequence, in order for a supply chain to be categorised as sustainable, it must be financial able to continue what it is currently doing for extended periods of time without violating current and future environmental and social balances.

Some contributions discuss the managerial devices used by buyers in order to set, communicate, implement, and evaluate progress in attaining social and environmental performance objectives, both internally in the focal buying organization and externally with suppliers (Mamic, 2005; Cilberti et al., 2008; Lee 2008). Mamic (2005, p.83) explores an integrated management approach resting on four main activities. First the active involvement of top management representatives in the development of a vision on supply chain sustainability. Second securing that employees and supplier understands the vision whilst recognizing, identifying and adjusting communication

approaches to the multiplicity of audiences to whom the sustainability requirements may be addressed. Third implementing the practices internally and at suppliers. Fourth a monitoring, feedback and improvement phase including an audit procedure and a corrective action-planning activity (Mamic, 2005). Cilberti et al. (2008, p. 1580) proposes three management devices as particular useful for the transfer of sustainability requirement. First, establishing written supplier requirements in the form of a code of conduct. Second, a supplier social and environmental performance monitoring element designed to verify compliance to the code. A training and communication element is the third set of managerial devices suggested. Such tools must be practices in order to help raise suppliers' awareness of the social and environmental requirements (Cilberti et al. 2008). Lee (2008) distinguishes between a monitoring-based approach involving gathering and processing supplier information, setting supplier assessment criteria, and evaluating the social and environmental performance of incoming goods and the suppliers that provide them, and a collaboration-based approach involves training and education programs given to suppliers, social and environmental managerial information sharing, and collaborative research with suppliers.

Pedersen and Andersen (2006) explore how a company can secure or safeguard that their suppliers fulfill their obligations stated in the signed code of conduct. Five clusters of safeguarding mechanisms are identified: Using direct sanctions, involving suppliers, securing goal congruence, third-party interventions, trust and reputational effects. In a different publications, however also building on the IKEA companies IWAY practices as its case, Andersen and Skjoett-Larsen (2009) claim to identify knowledge enhancing mechanisms, knowledge controlling mechanism, firm-specific assets and corporate history as four contingency factors influencing CSR implementation in supply chains. As part of the knowledge enhancing mechanisms which according to the authors will help embed CSR in the organization and supply chain the authors propose to include *“formal and informal training of key personnel at the supplier level, positive incentives for suppliers in terms of long-term contracts and enlarged volume if they implement codes of conduct, and regular auditing of suppliers' performance”*(p. 82).

Only very few contributions, within research discussing sustainability practices in the supply chain, have addressed such issues from the perspective of suppliers. How, will suppliers react to focal buyers attempts to enforce codes of conducts on them? What facilitates small and medium-sized suppliers in participating in green supply chain initiatives (Lee, 2008)? To what extent, and how will buyer pressure on suppliers to engage in CSR issues act as an incentive or disincentive to engage with the CSR agenda for SME suppliers (Baden et al. 2009)? Besides suppliers rational interest in participation, supplier resources, competencies and awareness have been proposed as frictions in the adoption of supplier sustainability practices. Does the supplier have enough information, resources, or expertise in order for it to be able to proactively or reactively to implement sustainability related requirements? Is it too busy with day to day tasks to be any more than reactive to most issues that are not of immediate urgency (Spence, 1999)? Such human, technological, and financial resource or competency restrictions of suppliers are especially eminent in SME suppliers (Clark, 2000). SME supplier, it has been claimed, have little know-how in bringing into effect the technical and managerial changes that would enable them to meet emerging environmental and social standards and often hesitate to reach out for help without some external stimulus (Luken and Stares, 2005). Further, and as an immediate explanation of why most SME suppliers are reactive in adopting social and environmental standards, such supplier often simply have less awareness of such requirements (Hall, 2000).

Sustainability practices at EAM

In recent years EAM has experienced an increasing interest from internal and external stakeholders on the conditions under which its products are produced. Although a code of conduct had been in place since the mid 1990s it was from 2008 that EAMs focus on social and environmental issues internally and externally at suppliers facilities upstream in the supply chain accelerated. According to EAM, the main business drivers for the work with corporate responsibility were: attracting, retaining and motivating employees; attracting social responsible investors (SRI funds); benefiting customer relationships; facilitating selection of well-managed suppliers and reducing risks associated with partners' potentially unethical business conduct.

In 2008, a process was initiated with a view to document and secure that principles of corporate responsibility were firmly anchored in the firm and further to facilitate that this corporate business philosophy would be more actively reflected in both the internal and external communication and practices. As part of the overall company project on social and environmental sustainability, it was decided that new and more thorough procedures and practices were needed in order to secure a sustainable upstream supply chain. This case deals with the part of the overall project that took place within the purchasing department. It describes how EAM had developed managerial devices to transfer social and environmental standards to their suppliers and how these efforts were received by suppliers. Four main outputs from the overall projects were dedicated to purchasing. A new code of conduct; a risk assessment tool and procedure; audit site-visit procedures and guidelines and training material for category managers had to be developed and implemented.

Securing contractual compliance

As a first step in initiating a dialogue and a transfer of requirements and accountability, new suppliers receive the document "*EAM code of conduct for suppliers*". As the code had recently been rewritten it was distributed to existing suppliers. Out of all EAMs suppliers about 70% of supplier and 90% of the turnover received the code of conduct and were expected to sign it. The remaining 30% of suppliers and 10% of the turnover, were either judged to be inactive, or were expected to be phased out inside a short timeframe and these suppliers therefore were not involved.

The code of conduct was a separate five page document. In the document, the aim and functioning of the code was explained. Then an overall statement explaining that suppliers had to fulfill the international and the entailed standards was provided. Finally, and as the core of the document, a list of specific terms detailing supplier expected social and environmental behavior was listed and explained (i.e. Conditions of Employment and Work; Workplace, Health and Safety; Freedom of Association; Forced Labour; Child Labour and Young Workers; Discrimination; Environmental Protection and Corruption and Bribery). In order to secure contractual compliance EAM distributed the new code of conduct to its existing supplier. Attached to the code was a letter that the supplier had to sign: "*By signing this letter, we <<Insert company name>>, hereby confirm that we are in compliance with the EAM Code of Conduct 2009 and that we accept the terms stated herein*".

At this stage 98% of the suppliers returned the contract without raising any questions or concerns as to its contents, hereby officially accepting their accountability of matters formulated in the EAM code. Five suppliers however, did comment on specific issue in the code. Two could not accept unplanned audits. Two had problems with the contracts overtime formulation "*Overtime shall be voluntary, infrequent and must not exceed 12 hours per week*". One of these supplier further commented on the contractual

requirements on established working relationships “*All workers shall be provided with a written, understandable and legally binding labour contract*”. In its reply the supplier argued and referred to local tradition and local law. This supplier on which EAM was highly dependent due to its technological competencies, was EAMs biggest supplier in regards to turnover. The supplier signed the code of conduct, although only after striking through the two passages in it that could not be accepted. This exception from the requirement in the contract was accepted by EAM. In another instance and only after a long intense dialogue, a different suppliers requests on not complying with requirements on not retaining the passport of some workers, was accepted although only reluctantly and conditionally by EAMs purchasing representative “*After your latest explanation and examining the law once again, I fell sure that what you are doing regarding the safe keeping of workers passport is OK and in compliance with our code of conduct. But it is “on the boarder” of what we can accept from our suppliers. We would like to discuss further during the next visit at yours, but until then we accept the below explanation*”. Finally, one of EAMs small suppliers could not accept the code and refused to sign it, arguing that “*we do not have any control over our sub-suppliers*”.

Selecting suppliers for audit

An accounting device named the Corporate Responsibility (CR) risk profile was designed to help assess the likelihood that a supplier would not comply with the code of conduct. Based on the geographical location of the supplier’s production facilities, the industry of the supplier, the supplier’s management systems and the strategic importance of the supplier to EAM, a risk score between 0 and 100 was calculated. Calculations were done by scoring each of the four dimensions and then multiplying these scores with a weight indicating the importance attached to each of the dimensions. Based on the total risk score suppliers were then categorized as having high, medium or low risk of non-compliance. When asked why the CR risk profile scoring was put in place the purchasing manager explained: “*The CR-risk profile procedure is put in place in order for us to avoid starting up a new supplier relationship, without us knowing the risk that they eventually will break our code of conduct*”.

In addition to informing the focal buying company on the potential level of misconduct attached to a particular type of supplier, the initial scoring also instructed EAMs category managers whether and when supplier sustainability audits had to be performed. For suppliers rated as being in high or medium risk of breach of EAMs code of conduct, no new business could be initiated before an on-site sustainability audit with satisfactory results has been conducted. Further, suppliers rated in the category high, had to be audited every 12 months and suppliers rated in the category medium risk had to be audited every 18 months. When, on the other hand, a supplier was rated as being in low risk of breach of EAMs code of conduct, a business relationship could be commenced right after the code of conduct was signed by the supplier.

Auditing suppliers

According to the sustainability audit procedure the purpose of the audit was to investigate whether the supplier operated in compliance with EAMs Code of Conduct; to assess and understand the working practices in the areas covered by the code; to identify best practice and potential problem areas and if needed, to agree on an action plan for improvement with timeframes and responsibilities. EAM use a neutral third party as auditor. An external third party was mainly used due to resource constrains internally, but also as a source of special competencies and in some cases as reassurance

for suppliers that questioned the objectivity of EAMs auditors and felt reluctant to share their documents and show their process technology.

The audit was structured into a planning phase and an execution phase. In the planning phase, the audit team had to determine what question/areas to ask/check during the upcoming audit and inform the supplier on timing and scope to ensure that relevant documentation and management would be available. In the execution phase, the team had to conduct an opening meeting with supplier representatives, request and review supplier documents (e.g. payslips, overtime documentation etc.), perform an on-site physical walk through of the facilities, interview at least five different workers and inform supplier representatives about initial findings and the schedule for the next audit.

Both during the planning and execution phase some suppliers acted less cooperative than others. Some of these suppliers directly expressed their concern about details in the audit procedure. One supplier, when confronted with their non-cooperativeness, argued that they felt uneasy about the fact that EAM requested payslips, since these according to the supplier would give EAM insights into their cost structure and thus potentially could be used in future price negotiations. Also, the fact that EAM as part of their audit would document their findings in photos taken on location was objected by this supplier, arguing that such documentation could be used to copy their production methods for competitive reasons. Finally, the five interviews with workers on location, was questioned as a valid device for collecting information. Without the presence of any management representatives the supplier felt that workers in these interviews would be compelled not to tell the complete truth. According to the suppliers, workers could be inclined to worsen stories about their work conditions and in this way mobilise EAM as an ally and thereby potentially increase their salaries and work conditions above what was required. The supplier therefore requested the presence of the HR-manager during the interviews; this however was not accepted by EAM.

Two managerial devices helped structure the on-location sustainability audit and its outcome. The sustainability checklist was developed based on the code of conduct formulations and it constrained 124 questions that potentially could be selected for audit. 5 of these questions were labelled “zero tolerance” and 11 “core convention” these questions had to be selected for every audit. If no compliance was found on a zero tolerance question, or only 6 core convention question was in compliance, a supplier failed the audit. For suppliers rated as being in high risk of breach of EAMs code of conduct a more thorough audit had to be performed. An accounting device helped score the individual audit questions (areas of compliance) and calculate a total supplier sustainability score between 0 and 100 points. For an area in full compliance 2 points was awarded, 1 point was awarded for partial compliance and 0 points was awarded for non-performance or when adequate compliance documentation could not be accessed. Suppliers receiving 90% of the total possible score was categorized as preferable, supplier receiving between 70% and 90% were categorized as acceptable and suppliers receiving less than 70% failed the sustainability audit. Suppliers failing the audit could not without subsequent improvement be accepted as suppliers.

Reacting to supplier audits

The outcome of the sustainability audit was a compliance audit report. This report was produced by the auditing third party and then subsequently sent via EAM to the supplier for comments. As part of the compliance audit report template a corrective action plan had to be filled out. This plan indicated the non-compliance areas, the level of non-compliance and the corrective actions advised.

Only in rare cases the social and environmental performance of the supplier and the willingness of the supplier to change were so far from what could be expected, that EAM would give the supplier an ultimatum either to improve conditions or face a termination as a supplier. However, also in this instance, the supplier would still receive a set of recommendation on how to improve its social and environmental performance. In all other cases and right after the audit, EAM and the supplier entered in a dialogue on how to resolve the identified non-compliance areas.

Some of the corrective actions that had to be taken required an initial investment. No formalized procedures were in place to guide such investment decisions. In some instances, especially when the supplier was important, EAM would be willing to involve itself as a resource or pay for such investments. The purchasing manager explained *“We are willing to participate actively in the corrective actions. We see it as our responsibility to secure that our partners or potential partners comply with international standards.”* In other cases EAM expected the supplier to provide all resources and bear the cost of the corrective actions.

Also for suppliers this phase involved a decision whether willingly to make all the changes/investments proposed by EAM and whether to accept to bear full or partial costs for them. It seemed that suppliers decisions were guided by a non-formalized business case calculation considering questions like: Would the cost involved in the investment of the proposed change outweigh the potential benefit from keeping a good relation with EAM? Would the proposed change decrease or increase factory floor productivity? In one case a supplier only reluctantly and after long considerations accepted to involve local Chinese fire department authorities to check if and how the firm adequately complied with local legislation, and if and how it could improve security for its workers. In an e-mail to EAMs purchasing representative the owner of this supplier stated *“According to your suggestion last time, we invited the fire and safety control team from our government last Thursday. We got a lot of good suggestions from them about how to improve safeties in my company. The fire and safety control team from the government appreciated that I had invited them since few company do that. I feel that they respect us. I feel warm reaction from staffs as well; more than 20 staff members are applying to take a position for improving factory safety”.* When this supplier learned that the involvement of the authorities did not result in fines or other types of punishments, but strengthened the firms’ relations with government authorities and improved the loyalties of its workers it became more inclined to make other proposed changes and investments.

Towards a process model for the transferral of sustainability in the supply chain

The case illustrates how we can understand the process that connects a buyers attempt to transfer its sustainability requirements with its suppliers’ willingness to participate as a process comprising four major phases: securing contractual compliance; selecting suppliers for audit; auditing suppliers and reacting to supplier audits. Further, the case illustrate how each of these four phases contain in them, either explicit or implicit, a range of decision making problems some of which was executed by the buyer and some of which was executed by the supplier. Each of these decision, one or more in each phase, was further it appears guided by a range of different criteria. The case illustrates how the outcome of these decisions will determine the scope and depth with which sustainability requirements will be transferred successfully throughout the supply chain. We summarise findings in table 1.

Table 1: Decision making in the sustainability transferral process

	Securing contractual compliance	Selecting suppliers for audit	Auditing supplier	Reacting to supplier audits
Managerial devices used	Written inscription in the form of a code of conduct contract	Accounting device (weighted average scoring model)	Audit procedure; Checklist and Accounting device	Audit report
Buyer decisions	A. Who should we send it to? B. Can we accept exceptions from the code?	D. Who should we include in and exclude from our ongoing sustainability audit procedure?	E. What activity should we involve in the audit?	G. To what extent can we accept what we see? H. What corrective actions should we suggest? I. To what extent should we involve ourselves in the corrective actions as resource and can we accept that we co-finance capital investments?
Buyers criteria	A. Degree to which supplier is judged as inactive or expected to be phased out inside a short timeframe. B. Degree of non-compliance and buyers dependence on the supplier.	D. Resource consumption for control; geographical location, type of industry management systems and strategic importance of the supplier.	E. Degree to which the activity is part of the checklist and defined as "zero tolerance" or "core convention".	G. Risk of accepting and suppliers willingness to improve. H. Suppliers' willingness and ability to improve. I. Strategic importance of the supplier.
Supplier decisions	C. Can we accept terms in the code?	No supplier involvement	F. How cooperative should we be?	J. Should we willingly make all the changes and investments proposed by our buyer and should we accept to bear the full or partial costs for their implementation?
Supplier criteria	C. Local law vs. code of conduct and dependence of supplier on buyer.	No Supplier involvement	F. Degree to which supplier trust the buyer not to use audit information to act opportunistically.	K. Cost involved relative to potential benefit; Experience with the strategic and financial consequences of previous change requests.
Outcome	Overview of scope and depth of supply chain contractual sustainability compliance.	An offsite developed sustainability risk map of the supply chain.	Perceived confirmation or disconfirmation of compliance specific to individual audited suppliers.	A list of accepted projects going to be implemented in order to obtain a sustainable supply chain.

Conclusion

Based on our findings we propose that buyer promoted sustainability in the supply chain can be mapped as multiple decision making problems structured in four major phases: Securing contractual compliance; Selecting suppliers for audit; Auditing suppliers and reacting to supplier audits. We have listed the different decision problems attached to these four phases and for each of them proposed decision criteria used by the buyer and its suppliers in order to make these decisions. We have demonstrate how different accounting devices play a major role in resolving the decision problems and how decision criteria apparently unconnected to the sustainability issue affect the outcome of the sustainability transferral process in the supply chain.

We do not claim that our findings can be generalised across cases, however returning to the theme of this paper, we have demonstrated how the question of providing incentives for suppliers to invest in buyer promoted sustainability activities in the supply chain is much more complex than just isolating a few contingency factors. Supplier incentives to participate is not occurring at a single point in the sustainability transferral process, but instead is spread out and can be assumed to rest on a multitude of different decision making problems. Stated differently the case and its analysis suggests that suppliers incentive for investment in buyer promoted sustainability activities in the supply chain is not an either or, but a matter of degree and timing.

Our research have several implication for future research, here we propose three issues. First, suggesting our four phase sustainability transferral process as a general model, how does other buying firms' sustainability activity fit into this model? Second, do different types of buying firms have different process models? Third, to what extent are the decision problems and criteria that we have identified in this study applicable across firms and supply chains?

For practitioners our findings have several implications. It would be valuable for buyers to analyse their sustainability enforcing practices as processes comprising separate phases. If buyers in each of the separate phases could gain awareness of their own and their suppliers' explicit or implicit decisions as well as the criteria used, such buyers, we argue, would increase their ability to control their transferral processes and construct positive incentives for supplier to participate in their sustainability initiatives.

References

- Andersen, M. and Skjoett-Larsen, T. (2009), "Corporate social responsibility in global supply chains", *Supply Chain Management: An International Journal*, Vol. 14, No. 2, pp. 75-86.
- Barbier, E. (1987), "The concept of sustainable economic development", *Environmental Conservation*, 14(2), pp. 101-110.
- Barden, D.A., Harwood, I.A., and Woodward, D.G. (2009), "The effect of buyer pressure on suppliers in SMEs to demonstrate CSR practices: An added incentive or counter productive?", *European Management Journal*, 27, pp. 429-441.
- 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 & Logistics Management*, vol. 35, no. 3, pp. 177-194.
- Carter, C.R. and Jennings, M.M. (2002), "Logistics Social Responsibility: An integrative framework", *Journal of Business Logistics*, Vol. 23, No. 1, pp. 145-180.
- Carter, C.R. and 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. and Rogers, D.S. (2008), "A Framework for Sustainable Supply Chain Management: Moving Towards 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, no. 1, pp. 88-106.
- Clark, G. (2000), "Developing better systems for communications: environmental best practice in small business", in Hillary, R. (Ed.), *Small and Medium-sized Enterprises and the Environment*, Greenleaf, Sheffield.
- Cruz, J.M. (2009), "The impact of corporate social responsibility in supply chain management: Multicriteria decision-making approach", *Decision Support Systems*, vol. 48, no. 1, pp. 224-236.
- Eisenhardt, K.M. (1989), "Building Theories from case study research", *Academy of Management Review*, Vol. 14, No. 4, pp. 532-550.
- Elkington, J. (1998), *Cannibals with Forks: The Triple Bottom Line of the 21st Century*, New Society Publishers, Stoney Creek, CT.
- Galdwin, T.N, Kennelly, J.J, and Ause, T-S. (1995), "Shifting paradigms for sustainable development: Implications for management theory and research", *Academy of Management Review*, Vol. 20, No. 4, pp. 874-907.
- González-Benito, J. & González-Benito, Ó. (2006), "The role of stakeholder pressure and managerial values in the implementation of environmental logistics practices", *International Journal of Production Research*, vol. 44, no. 7, pp. 1353-1373.
- Hall, J. (2000), "Environmental supply chain dynamics", *Journal of Cleaner Production*, Vol. 8 No. 6, pp. 455-71.
- Kaynak, H. & Montiel, I. (2009), "The Relationship between Sustainable Supply Chain Management and Sustainable Performance: an Integrated Framework", *Academy of Management Proceedings*, pp. 1-6.
- Krause, D.R., Vachin, S. and Klassen, R.D. (2009), "Special topic forum on sustainable supply chain management. Introduction and reflections on the role of purchasing management", *Journal of Supply Chain Management*, Vol. 45, No. 4, pp. 18-25.
- Kvale, S. (2007), *Doing Interviews*, Sage Publication Limited.
- Lee, S-Y. (2008), "Drivers for the participation of small and medium-sized suppliers in green supply chain initiatives", *Supply Chain Management: An International Journal* 13/3, 185-198
- Luken, R. and Stares, R. (2005), "Small business responsibility in developing countries: a threat or an opportunity?", *Business Strategy and the Environment*, Vol. 14, pp. 38-53.
- Mamic, I. (2005), "Managing Global Supply Chain: The Sports Footwear, Apparel and Retail Sectors", *Journal of Business Ethics*, vol. 59, no. 1, pp. 81-100.
- Markley, M.J. & Davis, L. (2007), "Exploring future competitive advantage through sustainable supply chains", *International Journal of Physical Distribution & Logistics Management*, vol. 39, no. 9, pp. 763-774.
- Meredith, J. (1993), "Theory building through conceptual methods", *International Journal of Operations & Production Management*, Vol. 13, No. 5, pp. 3-11.
- Min, H. & Galle, W.P. (2001), "Green purchasing practices of US firms", *International Journal of Operations and Production Management*, vol. 21, no. 9, pp. 1222-1238.
- Montabon, F., Melnyk, S.A., Sroufe, R. and Calantone, R.J. (2000), "ISO 14000: assessing its perceived impact on corporate performance", *Journal of Supply Chain Management*, Vol. 36, No. 2, pp. 4-16.
- Pedersen, E.R. and 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, pp. 228-240.
- Pagell, M. & Wu, Z. (2009), "Building a More Complete Theory of Sustainable Supply Chain Management using Case Studies of 10 Exemplars", *Journal of Supply Chain Management: A Global Review of Purchasing & Supply*, vol. 45, no. 2, pp. 37-56.
- Preuss, L. (2005), "Rhetoric and reality of corporate greening: a view from the supply chain management function", *Business Strategy and the Environment*, Vol. 15, pp. 123-139.
- Rao, P. and Holt, D. (2005). "Do Green Supply Chains Lead to Competitiveness and Economic Performance?", *International Journal of Operations and Production Management*, Vol. 25, No. 9, pp. 898-916.
- Spence, L.J. (1999), "Does size matter? The state of the art in small business ethics", *Business Ethics: a European Review*, 8, pp. 163-174.
- Vasileiou, K. & Morris, J. (2006), "The sustainability of the supply chain for fresh potatoes in Britain", *Supply Chain Management*, vol. 11, no. 4, pp. 317-327.
- Yin, R.K. (2003), *Case Study Research: design and Methods*, 3rd ed., Sage Publications, Thousand Oaks, CA.