# **Ethics and Competitiveness in Supply Chain Management**

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**Abstract** This study is motivated by a need for consideration of both ethics and competitiveness through supply chain activities and its management. This research, from the perspectives of Bosnian firms' employees, aims to identify the frequency and personal disturbance level of ethics and human rights issues, experienced supply chains and competitiveness of the local companies in Bosnia and Herzegovina, how managers handle ethics and human rights issues through their business and with their employees, and how code of ethics have influences in the business level. In order to explore these issues, we adopted a survey based study which has been conducted on 185 employees of Bosnian firms from six different cities in BIH. The results mainly indicated that the employees of the surveyed companies strongly believe that their companies have considered ethics while constructing their business and supply chains. They moreover assumed that their companies do not have ethical problems. However, they are rated to be slightly good in their ethical considerations about customer buying behavior and competitiveness.

**Keywords** Ethics, Competitiveness, Supply Chain Management, Survey

### 1. Introduction

Due to the influences of globalization and fierce competition in the market, organizational agility and the competitiveness have been increasingly considered[1]. Increased customer expectations and global competition require companies behave accordingly[2]. Therefore, global companies are considering their supply chains and its management more and more in order to be competitive. While doing so, there may appear not-proper understandings, relationships and behaviors among supply chain members and in their activities. These may lead the appearance of un-ethical behavior through supply chain.

Meriam-Webster[3] online dictionary provides the definition of ethics as: "...a set of moral principles; a theory or system of moral values; the principles of conduct governing an individual or a group; a guiding philosophy; or a consciousness of moral importance". However, the definition of ethics may vary when the perspective changes. Therefore, every discipline has its own definition about ethics. The popularity of ethical research and the effort of generating ethical codes have been increasing. Supply Chain Management (SCM), business ethics and competitiveness have considerably studied. But, the literature weakly considers supply chain competitiveness and ethics together.

This study has been motivated by the question about the existence of competitiveness and ethics together in the same

organization. Therefore, the literature is reviewed in order to get the required idea, a measurement scale has been developed and this has been applied to a survey approach. The developed survey has been conducted on the employees of Bosnian enterprises. The survey is prepared to evaluate the perceptions of the surveyed employees' considerations about their companies' ethical behavior and competitiveness through their supply chains.

This study may be a useful guideline for structuring supply chains competitive and in line with the ethical codes. Therefore, the companies may consider being both ethical and competitive at the same time and structure their supply chains accordingly.

The paper is structured under five headings. The next section includes some works about the relevant literature. The third section provides information about the data and methodology. The fourth section is used for presenting the findings of descriptive analyses. Final section concludes the research.

### 2. Literature Review

Ethics and competitiveness of supply chain management have been explored by many researchers and practitioners from various perspectives. This section provides the relevant literature about ethics and competitiveness of firms from supply chain perspective.

Verma and Seth[4] aimed to study the importance of the competitiveness in the supply chain and to present a conceptual framework for Supply Chain Competitiveness (SCC) by using bi-directional information methodology. Their framework is based on supply chain activities

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necessary for SCC and the benefits which are the outputs of SCC including the dimensions (SCC inputs, SCC environment and SCC outcomes). They identified that the framework is useful to understand the activities, roles and responsibilities of suppliers, manufacturers and distributors in order to achieve SCC, to manage supply chain according to the needs of organizations and has implications for future studies about the supply chain performance.

Verma and Seth[5] aimed to explore the critical issues related to supply chain competitiveness and presented the roles of the major components of supply chain including suppliers, manufacturers and distributors. Some future perspectives are then presented and they found that Supply chain management is one of the strongest approaches used to gain competitive advantages. SCC can be obtained by integrated efforts of all the components of the supply chain. Integrated efforts of the components and the roles and issues of the supply chain components are also emphasized. They suggested that the future work can identify and evaluate the variables of supply chain competitiveness.

Lillywhite[6] aimed to study the ways of improving supply chain management by the help of ethical purchasing and providing some practical steps and advice for the organisations in order to take responsibility for the labour, environment and human rights practices through their supply chain including both domestic and international production networks. She found that ethical purchasing is used as the acquisition of goods and services through supply chains and subcontractors in a responsible manner, by considering the production and delivery of goods and services. She also identifies the importance of global collaboration with local stakeholders including trade unions, non-government organisations (NGO's), academics, governmentrepresentati ves and industry associations as the most meaningful way to develop successful ethical purchasing practices and build capacity amongst workers.

Johnson[7] studied the influence of Technology and Globalization on supply chain competitiveness bv researching developed models and methods about supply chain practices through the literature. He stated that managers and management scientists have combined the new approaches in order to increase the competitiveness of supply chain. Johnson (2006) reported in his study that, at a seminar organized by Dartmouth's Tuck School of Business, supply chain scholars discussed some of the challenges for researchers, managers, and policy makers and grouped the important issues into five areas: (1) Globalization and outsourcing (the impact of China and India on supply chain structure and coordination); (2) New technologies for enterprise integration and collaboration; (3) Economic forces within and between supply chains (consumer pricing, supplier contract negotiation, etc.); (4) Risk management (supply chain complexity and from security threats); and (5) Product life-cycle management such as postsale service and product recovery.

Gunasekaran, Lai and Cheng[8] studied the ways of developing Responsive supply chains (RSC) by considering

a competitive strategy in a networked economy and focusing more on strategic alliances/partnerships in order to keep speed and flexibility. They stressed the importance of both SCM and agile enterprise. They suggested advanced IT and investment in knowledge and IT for developing agile supply chains. Furthermore, they also suggested developing global suppliers/partnerships and enterprise resource planning (ERP) systems for agile supply chains. They proposed a conceptual framework to develop an RSC in order to achieve speed, flexibility, and cost reduction. They suggested a suitable information system integrating ERP, EDI, and the Internet for improving communication and ensuring a smooth flow of materials along the value chain in order to achieve an RSC. They also suggested appropriate benchmarking, performance measures, and metrics for supply chain agility.

Ricks[9] studied the ways of developing ethical Supply Chain Management for Industry Competitiveness by stressing on supply chain management. He found that Effective verdict linkages of the firms within the supply-marketing chain together with vertical partnership and alliance relationships are necessary in order to achieve modern competitiveness. Furthermore, he stated the importance of the perspective of the relevant firms, supply chain managemen industry and related strategies for the competitiveness.

Levin [10] studied the ethics problem in the supply chain in order to build an ethical supply chain and identified that most Global companies has no enough infrastructure to quickly contact the members of their supply chain, and communicate with their suppliers on critical issues of ethics and compliance. He reported that many Global companies have already initiated the collaboration with the remaining companies to develop technology-powered "Supplier Ethics Management (SEM) platforms". He suggested using a web-based SEM platform as the fastest and easiest way to collect and maintain contact information among company suppliers, and communicate mission-critical ethics and compliance information. He stated that SEM platforms are inexpensive and hosted, maintained and administered by third-party vendors who are expert in ethics and compliance risk management.

Marlatt[11] searched the role of organization in helping public and their employees to understand the unethical behavior and to fulfill their moral and legal obligations. He aimed to identify the most important ethics considerations by Social responsibility, Investigatory Response, environmental responsibility, financial deception, Defective or Deceptive Products/Services/Practices, Board of Directors, etc. He suggested the necessary regulations to be followed in ethics. He found out that companies can have a substantial impact on people's lives and well-being and suggested companies avoiding business with suppliers or partners who perform unfair labor practices such as slave labor or child labor, low payment, unsafe work environments, or ethnic, racial, gender, or sexual discrimination. He furthermore suggested that companies have moral and legal obligations for

environmental protection and should ensure that their and supply chain members' operations are environmentally safe. He concluded that companies must develop rules of ethics and present them to employers.

Zaman<sup>[12]</sup> aimed to study the impact of profession and ethics on the firm and all its business. He reported that professional ethics includes Global Sourcing Principles, Partnership with Suppliers, Social Audit and Verification, Continual Improvements and Sanctions. He found that Supplier ethics management (SEM) enhances the relationships with suppliers and customers, inventory control, demand forecasts and control of every link in the chain. He defined SEM as a relatively new business practice to enhance supply chain management through strategies, programs and metrics by aligning supplier business conduct with purchaser standards in compliance, ethics and corporate responsibility. Therefore, supply chain risks can be reduced. He suggested the rules that must be followed as (1) making ethics and compliance a factor in supplier selection; (2) developing and maintaining important suppliers' profiles; (3) assigning ethics and compliance responsible staff to major supply relationships; (4) assessing regularly supplier ethics; (5) analyzing supplier ethics data regularly; and (6) targeting and classifying suppliers by importance and ethics risk.

ISM[13] aimed to identify all principles of ethics for one organization. Their work provided careful integrity of the decisions and actions in the first priority, valuing the employers as the second most important and valuing the profession as the least important. They suggested the following as the ways of achieving them: Impropriety, Conflicts of Interest, Influence, Responsibilities to the Employees, Supplier and Customer Relationships, Sustainability and Social Responsibility, Confidential and Proprietary Information, and Professional Competence. The institute identified that some rules can initially prevent unethical behavior in relationships, actions and communications. They suggest ensuring harmony of personal, business or other activity with the lawful interests of employer.

i-Sight[14] aimed to describe increasing importance of transparency and adequate supply chain ethics by identifying several actions that organizations can take to reduce supplier risk and protect the company brand name. i-Sight (2007) suggested evaluating suppliers, vendors and any other points of contact within the organizational network while performing risk assessments. They also suggested examining the culture, ethics and compliance practices of the supply chain members in order to decrease the supply chain risks. Therefore, companies can reach an alignment in their internal and external decisions. They reported that consumers, investors, business partners, regulators, and media organizations expect from the company and its entire supply chain ethical behavior. They furthermore continued that the supplier-generated ethics problems have the potential to be one of the most dangerous business risks of today's leading companies.

By targeting to describe a conceptual framework and empirical illustrations of the transparency of SCM ethics through supply chains, Svensson[15] investigated and described the major ethics issues in supply chain management as (1) considering compliance and ethics in supplier selection and evaluation; (2) targeting and segmenting suppliers by commercial importance and ethical risk; (3) creating and maintaining compliance histories of important suppliers; (4) assigning compliance personnel to important supplier relationships; and (5) regularly assessing supplier risk-profiles. He identified that global companies may not be dedicated to ethical concerns and commitments through their supply chains and have tendency to create some restrictions in their statements and promises of corporate social responsibility. He concluded that ethical consideration should be in corporate actions and behavior through supply chains. Furthermore, he suggested that the corporate social responsibility in line with SCM ethics should also include indirect business relationships. He pointed the transparency of SCM ethics for further research in order to generate theory best practices of SCM.

Rice[16] aimed to study Islamic Ethics and its implications for Business and the positive influence of Islamic philosophy on business in Egypt. He suggested that future studies can focus on the most concerned ethical issues of Muslim managers and the ways of these managers deal with issues of social responsibility in their countries.

### 3. Data and Methodology

The developed survey questionnaire is distributed by hand to the employees of Bosnian companies that take part in a supply chain. The survey includes totally 34 questions. The survey questionnaire was divided into seven question groups each group contains at least three questions and a maximum of six. At the end of survey collection period, 185 surveys are gathered. The surveys are encoded, inserted into a spreadsheet and analyzed descriptively.

### 4. Results

#### 4.1. Demographics

The results showed that more than half of the respondents (113/185) are from Marketing and Sales (50), Research and Development (32), IT (30), Production and Maintenance (23) and Accounting (18) departments. The remaining departments are represented less. Male and female respondents almost equally participated to the study (95 vs. 90). The respondents are generally observed to be younger than 40 (154/185).

#### 4.2. Question naire Analysis

The questionnaire includes six main dimensions. The results for these dimensions are reported in the following

section.

#### **Consumer Rights and Company Ethical Behavior**

According to the results, the employees rated their companies to have very poor ethical considerations about their customers' rights such as moral values of customers in buying and selling activities and their purchasing behavior. However, they are evaluated to be considering the general ethics codes such as respect for all the religions and their ethical rules, not harming customer purchasing behavior and supporting ethical (green) shopping (Table 1). According to the perceptions of the respondents, their organizations have ethical considerations in their internal and external environments and therefore they source their activities according to the ethical considerations. The respondents identified that their companies give response to the professionals. While doing so, they are estimated to be considering ethical principles. Moreover, the respondents seem to be feeling and familiar with company ethical standards. Finally, the surveyed companies' employees admit that their companies have a special unit to monitor ethical considerations through their activities (Table 2).

Organizational Ethical Consideration

Table 1. Consumer Rights and Company Ethical Behavior

Items	Mean	Std. Deviation
My company does not harm the right of consumers' purchasing behavior	4.83	1.444
My company considers the moral values of customers in buying and selling activities	4.23	1.582
My company is respect ful about right to safety, right to choose, right to be heard	4.28	1.520
My company respects all religions through their business	5.31	.713
My company respects the ethical rules of religions in its business	5.23	.941
My company's existing system is supportive for ethical shopping	4.92	1.257

Table 2.	Organizational Ethical Consideration
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Items	Mean	Std. De viation
My company considers ethics while sourcing its activities in its internal environment	5.55	.827
My company considers ethics while sourcing its activities in its external environment	5.26	1.103
My company flexibly and responsibly respond to all professionals	5.14	1.354
My company takes the moral and ethical responsibility in business	5.31	1.250
I'm familiar with the principles and standards of ethics in the company	5.18	1.325
My company has a separate unit that monitors the ethics of business	5.67	.943

Table 3.	Ethical	Supply	Chain
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Items	Mean	Std. Deviation
Each job with suppliers requires a contract that states business ethics	5.36	1.334
My company tries to enhance both its and its suppliers' activities	5.09	1.479
My company has a ethically verified supply chain management consideration in its activities	5.03	1.391
My company successfully solves the problems related to the ethical conduct of superiors and subordinates	5.51	.782
My company has never met with unethical behavior by suppliers, investors and business partners	5.94	1.012
My company clearly deployed roles and responsibilities to suppliers	5 32	1 4 7 4

Table 4. Company Success

Items	Mean	Std. De viation
My company has clear target customer group	4.77	1.393
I believe that my company has advantages in their line of business	4.53	1.575
My company is responsive to the customer orders	4.86	1.565
My company has a considerable share through the market	4.50	1.842
My company can efficiently organize all its works	4.45	1.772
My company is adapting to changes in the environments	5.77	.948
My company successfully entering into new businesses	5.78	1.187

The respondents agreed that the surveyed companies sign their contracts with their suppliers by stating business ethics. The employees assume that their companies want to enhance not only their but also supply chain members' activities and therefore, have set up their supply chains by considering ethical codes. They also commented that their organisations have deployed supply chain members' roles and responsibilities related to ethical issues. Moreover, the surveyed companies are rated by their employees as very effective in solving ethical problems. Finally, they strongly assumed that their companies do not have any unethical behavior of supply chain members (Table 3).

#### **Company Success**

The surveyed companies' employees seem to be slightly agreed on the questions in this category. From the perspectives of their employees, it is observed that they slightly defined their customer target group and strategy about choosing the investors and business partners; they have slight advantage in their business line and share in their market and can somewhat organize their works. Furthermore, the respondents feel that their companies are somehow responsive to customer orders and can moderately organize their works. However, they strongly believe that their companies should adapt to environmental changes and enter a new possible business (Table 4).

### 5. Conclusions

As stated at the beginning, Supply Chain Management (SCM), business ethics and competitiveness have been studied from different perspectives. But, the literature weakly considers supply chain competitiveness and ethics together. Therefore, the need to consider both ethics and competitiveness through supply chain activities and management has encouraged this research. This study therefore has developed survey scale items by the help of reviewed literature and aimed to evaluate these issues from the perspective of surveyed companies' employees. The

constructed survey questionnaire is conducted through Bosnian enterprises.

According to the results, the employees consider that their companies practically do not consider ethical rules about customer buying behavior. However, they are believed to be considering ethics while setting up their customer related activities. They are also found to be considering ethics in their own organizational internal and external activities through the supply chains. Moreover, the employees assumed that their companies have a strong ethical consideration about their supply chain activities and supply chain members. They believed that the subjected enteprises want to protect and enhance both their and the members of supply chain's rights and competitiveness. They have commented that their companies haven't experienced any un-ethical behavior of supply chain members and seem to be strong in solving a possible ethical problem through the chain. On the other hand, surveyed Bosnian companies are believed to be slightly competitive in their operations.

Employees are observed to have perceptions of a high level of knowledge regarding ethics/human rights issues. But, they rated a low degree of ethics/human rights issues in their organizations. This may be due to employees' overestimation of their true level of knowledge regarding ethics/human rights issues and thus not recognizing these issues when they are experienced. On the other hand, the ethics/ human rights related questions in the questionnaire may not represent the experiences of surveyed employees.

This study may be weak in that the results are built on the perceptions of the surveyed employees trough the target companies. However, since ethics are very much related to the some moral values specific to a group[3], it may provide some implications for the companies in the selected region. Furthermore, it can also provide valuable implications for the members of any supply chain for structuring competitive supply chains in line with the ethical codes. Therefore, the companies may consider being both ethical and competitive at the same time and structure their supply chains accordingly. This study may also be useful for the literature by developing a specific scale about the issue. Moreover, the scale may be repeated and enhanced in further studies.

De	Demographics											
a	Your d	Your department/unit:										
b	Your c	urrent position/r	ole in dept/u	ınit:								
c	Howle	ong have you bee	n in current	t position/r	ole?:							
d	Your h	ighest education	level: D	Octorate	Master	Undergraduate	Other					
e	Gender	:: Male	Fei	male								
f	Age:	⊴30	31-40	41-50	51-60	≥61						

### Appendix. Sample Survey

Cons	umer Rights	Disagree			ee			
a	My company does not harm the right of consumers' purchasing behavior	1	2	3	4	5	6	7
b	My company considers the moral values of customers in buying and selling activities	1	2	3	4	5	6	7
с	My company is respectful about right to safety, right to choose, right to be heard	1	2	3	4	5	6	7
d	My company respects all religions through their business	1	2	3	4	5	6	7
e	My company respects the ethical rules of religions in its business	1	2	3	4	5	6	7
f	My company's existing system is supportive for ethical shopping (green consumers)	1	2	3	4	5	6	7

Orga	Organisational Ethical Consideration		Disagree					ee
а	My company considers ethics while sourcing its activities in its internal environment	1	2	3	4	5	6	7
b	My company considers ethics while sourcing its activities in its external environment	1	2	3	4	5	6	7
c	My company flexibly and responsibly respond to all professionals	1	2	3	4	5	6	7
d	My company takes the moral and ethical responsibility in business	1	2	3	4	5	6	7
e	I'm familiar with the principles and standards of ethics in the company	1	2	3	4	5	6	7
f	My company has a separate unit that monitors the ethics of business	1	2	3	4	5	6	7

Suppl	y Chain Management	Disagree			Agree			
а	Each job with suppliers requires a contract that states business ethics	1	2	3	4	5	6	7
b	My company tries to enhance both its and its suppliers' activities	1	2	3	4	5	6	7
c	My company has a ethically verified supply chain management consideration in its activities	1	2	3	4	5	6	7
d	My company successfully solves the problems related to the ethical conduct of superiors and subordinates	1	2	3	4	5	6	7
e	My company has never met with unethical behavior by suppliers, investors and business partners	1	2	3	4	5	6	7
f	My company clearly deployed roles and responsibilities to suppliers	1	2	3	4	5	6	7

Com	Competitiveness		isag	ree	Agree					
а	My company has clear target customer group	1	2	3	4	5	6	7		
b	I believe that my company has advantages in their line of business	1	2	3	4	5	6	7		
c	My company is responsive to the customer orders	1	2	3	4	5	6	7		
e	My company has a considerable share through the market	1	2	3	4	5	6	7		
f	My company can efficiently organize all its works	1	2	3	4	5	6	7		
g	My company is adapting to changes in the environments	1	2	3	4	5	6	7		
h	My company successfully entering into new businesses	1	2	3	4	5	6	7		

## REFERENCES

[1] Bovet, D. and Sheffi, Y. (1998). The brave new world of Supply Chain Management. *Supply Chain Management*  Review, 2 (spring), 14-22.

- [2] Mentzer J.T. (2004). Fundamentals of Supply Chain Management-Twelve Drivers of Competitive Advantages, University of Tennessee, Knoxville, Response books, New Delhi.
- [3] Ethics Definition and More from the Free Merriam-Webster

Dictionary. (n.d.). Retrieved April 2, 2013, from http://www. merriam-webster.com/dictionary/ethics.

- [4] Verma, A. and Seth, N. (2011a). A Conceptual Framework for Supply Chain Competitiveness. *International Journal of Human and Social Sciences*, 6(1), 5-10.
- [5] Verma, A. and Seth, N. (2011b). Achieving Supply Chain Competitiveness: Some critical Issues. *International Journal* of Engineering Science and Technology, 2(11), 6209-6213.
- [6] Lilly white, S. (2004). Responsible supply chain management: Ethical purchasing in practice. Manager Ethical Business, Brotherhood of St Laurence, Australia.
- [7] Johnson, M. E. (2006). Supply Chain Management: Technology, Globalization, and Policy at a Crossroads. *Interfaces*, 36(3), 191–193.
- [8] Gunasekaran, A., Lai, K-H. and Cheng, T.C.E. (2008). Responsive supply chain: A competitive strategy in a networked economy. *Omega*, 36, 549 – 564.
- [9] Ricks, D. (2000). Supply Chain Management for Industry Competitiveness: Case Examples from the Tart Cherry Industry. *Journal of Food Distribution Research*, 49-52.

- [10] Levin, M. (2008). Building an Ethical Supply Chain. Retrieved April 2, 2013, from http://www.s-ox.com/dsp\_get FeaturesDetails.cfm?CID=2235.
- [11] Marlatt, A. (2003). Rules of Business Ethics | Fast Company. (n.d.). Retrieved April 2, 2013, from http://www.fastcomp any.com/46266/rules-business-ethics.
- [12] Zaman, A. (2008). Ethics in Supply Chain Management. Retrieved April 2, 2013, from http://www.idt.mdh.se/kurser/ cd5590/Archives/06\_11/lectures/Ethics%20in%20Supply%2 0Chain%20M anagement.pdf.
- [13] ISM (2007). Social Responsibility Ethics and Business Conduct. (n.d.). Retrieved April 2, 2013, from http://www. ism.ws/SR/content.cfm?ItemNumber=4762.
- [14] i-Sight (2007). The Importance of Supply Chain Ethics and Compliance | i-Sight. (n.d.). Retrieved April 2, 2013, from http://i-sight.com/ethics/supply-chain-ethics-compliance/
- [15] Svensson, G. (2009). The transparency of SCM ethics: conceptual framework and empirical illustrations. *Supply Chain Management: An International Journal*, 14(4), 259 – 269.
- [16] Rice, G. (1999). Islamic Ethics and the Implications for Business. Journal of Business Ethics, 18, 345-358.