

Chapter 8

Decision Models and Governance Mechanisms Considering Corporate Social Irresponsibility in Supply Chains

Bin Liu

Shanghai Maritime University, China

Pepei Ying

Shanghai Maritime University, China

Lin Peng

Shanghai Maritime University, China

ABSTRACT

This chapter describes corporate social irresponsibility (CSI) with a global variable, and supposes it has a negative influence on market demand to set up a decision model in supply chain for the joint effect of price and CSI on demand. Analyzing manufacturers' decisions on CSI under two supply chain structure settings including single-channel supply chain and competitive supply chain, the authors hope to design governance mechanisms to restrain the CSI performance of the manufacturers so as to provide a theoretic reference to the better fulfillment of sustainable development and social responsibility. Moreover, this chapter makes a simple extension on the asymmetry initial base demand, and the result is quite different from the symmetry initial base demand. It is found that an asymmetric CSI strategy can achieve equilibrium. A suggestion in this chapter is to intensify the competition in supply chain by supporting smaller enterprises and preventing complete monopoly.

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INTRODUCTION

The problematic vaccine incident in 2016 revealed that the vaccine not stored in stringent cold chain was transported and sold to many cities and provinces, and vaccination might not achieve the expected protective effect; the melamine-tainted milk powder incident, the most impressive food additive issue in 2008, shocked the whole nation as soon as it was exposed, with almost all the domestic milk powder enterprises involved, among which Sanlu stood in the breach and brought about a crushing blow to the domestic milk powder industry. The disclosure of these negative events threw lots of enterprises into the crisis of survival and sustainable development, and some even went into liquidation. At the root of this was corporate social irresponsibility. In other words, these enterprises did not integrate social responsibility into their corporate culture and values. Enterprises' irresponsible behaviors indeed could reduce expenditure and bring immediate economic interests, but it would affect earning persistence (Wan & Liu, 2015). With listed companies as samples, Yang and Yang (2016) explored the relationship between corporate social responsibility (CSR) and financial performance, revealing that in the current Chinese context, the performance of CSR is not optimistic, since it not only doesn't have positive effect on sales, but also may lead to a cost increase and profit decrease.

However, in real life, similar product manufacturers compete against each other more and more intensely. Some manufacturers, to reduce production cost, bear no or little social responsibility. As a result, manufacturers have to weigh and balance between profit and social responsibility and that motivates us to study the following questions: Are manufacturers performance CSI always beneficial? On what condition can manufacturers do not perform CSI and undertake CSR?

This chapter takes manufacturers, a part of supply chain that goes wrong the most frequently and causes the most serious consequence, as a main research object to explore whether manufacturers really put immediate interests over corporate sustainable development and corporate social responsibility in supply chain competition. The authors explore manufacturers' CSI-based decision behavior in two supply chain structure settings: a single-channel supply chain and the competitive supply chain. In a single-channel supply chain, consumers are treated as a subject of decision-making to set up a three-stage Stackelberg game model. In a competitive supply chain, there is a Nash game in competition between manufacture 1 and 2 which hold the same initial base demand, while there is a Stackelberg game within each supply chain. Based on a reflection on this problem, this chapter hopes to get some suggestions to provide reference for corporate sustainable development.

BACKGROUND

In terms of corporate sustainable development (CSD), many scholars have discussed the relationship with CSR. Hu (2004) illuminated that CSR is an ethical basis for CSD and has practical significance to CSD. Xin and Liao (2013) argued that CSR has driving and restrictive effects on CSD. If an enterprise does not undertake the social responsibility, it can only gain temporary profit and achieve short-term development, but cannot develop sustainably. Hediger (2010) defined CSR as an action contributing to corporate profit maximization and social improvement, and pointed out that CSD requires corporate profit maximization, which shouldn't decrease with time. He also pointed out that if an enterprise undertakes the social responsibility, it could accumulate reputation and capital to enhance its values. Of course, some other scholars have confirmed that a certain positive correlation between CSR and corporate

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