

CHAPTER 6

CONCLUSIONS

This study has developed new schemes to reveal the manufacturer's standpoint in return contract. The retailer and manufacturer both benefit from developed contracts, that is, "win-win" condition could be achieved in the business channel. Three research problems have been reviewed. First, the decentralized dilemma within a supply chain has been discussed. We have revealed the decentralized effect within a supply chain, as well as modeled the decision policies of the retailer and the manufacturer. We propose that the retailer should offer an option premium to induce the manufacturer to increase production quantity. We have demonstrated that when the retailer offers the manufacturer an option premium, the system can be Pareto efficient, and thus remedy the inefficiencies caused by decentralized control within the system. Second, we evaluated the quantity discount strategies and return policies of the manufacturer. A menu of discount-return combinations that balanced a return policy with a quantity discount was designed to produce the optimum product price and order quantity. Furthermore, we have shown that return policy can be considered as mirror-images of quantity discount strategy. Finally, we propose quantity discount will be helpful to induce a manufacturer to accept return. A generalized returns-quantity discounts model, which represents the interests of both the retailer and the manufacturer, is developed and presented. The presented study has shown that a quantity discounts-returns scheme is self-enforcing, that is, the retailer and the manufacturer can both benefit from the scheme. Furthermore, it has been demonstrated that, through coordination, the system can be Pareto efficient, and thus achieves a real win-win status.