

## **Information Sharing in a Supply Chain with a Common Retailer and Production Diseconomies**

### **Abstract**

We consider a supply chain with two competing manufacturers selling substitutable products through a common retailer. Both manufacturers face diseconomies of scale in production. The retailer decides whether to share a private imperfect demand signal with any of the two manufacturers before observing the signal. A multi-stage game is formulated to analyze how the firms make information sharing, wholesale price and retail price decisions. We consider several scenarios where the retailer or the manufacturers are the leaders in information sharing decisions and study how such leadership affects the equilibrium outcome. We also perform sensitivity analysis to investigate how different parameters impact the information sharing decisions as well as the performance of the firms.

### **Speaker's Profile**

Albert Y. Ha is Chair Professor and Head of the Department of Information Systems, Business Statistics and Operations Management at the Hong Kong University of Science and Technology (HKUST). He received his B.Sc. degree in Civil Engineering from the University of Hong Kong, MBA degree from the Chinese University of Hong Kong and Ph.D. degree from the Graduate School of Business of Stanford University. Prior to joining HKUST in 2001, Professor Ha has served on the faculty of the School of Management of Yale University for nine years. His research interests are in the areas of Supply Chain Management and Economics of Queuing Systems. He has published in journals such as *Management Science*, *Operations Research*, *Naval Research Logistics*, *IIE Transactions* and *European Journal of Operational Research*. He currently serves as an Associate Editor of *Management Science*, *Operations Research* and *Manufacturing and Service Operations Management* and a Senior Editor of *Production and Operations Management*.