Keio Business School

Hold-Up Problem: Underinvestment in Parts Transactions

Questions

Read the text described in Sections 1 and 2 in order to understand the situation that firms in question are faced with, where the setup of the model is explained. Consider the merger negotiations described in subsection 2.3, which is based on the merger of Fisher body (body supplier) by GM (automaker). The bargaining power of the manufacturer and supplier 1 is known to each other in advance.

1. Let β denote the rate of surplus distribution at which the manufacturer can receive the surplus generated from the trade between the manufacturer and supplier 1. The manufacturer's profit anticipated on Date 1 is then $\beta\alpha x - x^2/2$, where $x^2/2$ represents the manufacturer's expenditure of capital investment and α denotes the asset specificity of the equipment held for supplier 1. What is the optimal asset specificity the manufacturer should choose?
2. Suppose that the manufacturer can receive half of the surplus, i.e., $\beta = 1/2$. Then, is underinvestment resolved?
3. Suppose that the manufacturer acquires some amount of supplier 1's shares before the merger and thus the bargaining power of the manufacturer increases, i.e., the rate β of surplus distribution increases. Then, how is underinvestment improved upon as β increases?
4. Are there any obstacles to the manufacturer's acquisition of supplier's shares before the merger? What can be a barrier? Explain your answer referring to post-merger integrations.
5. Compared to companies in the U.S. and Europe, labor unions are in many cases organized as company unions instead of craft unions in Japan. Discuss the role of labor unions in merger negotiations.
6. More generally, reconsider the merger of Fisher body by GM from the viewpoint of transaction costs described in the Appendix. (Hint: Coase (2000) also argued about this merger.)

This case was written by Naoki Watanabe (Graduate School of Business Administration, Keio University) for facilitating classroom discussions at Keio Business School. This case is published by Keio Business School. Inquiries about reproducing the case should be referred to Keio Business School (4-1-1 Hiyoshi Kohoku, Yokohama, Kanagawa 223-8526; Phone: +81-45-564-2444; E-Mail: case@kbs.keio.ac.jp) To order copies of the case, go to the website (http://www.kbs.keio.ac.jp).