

Endogenous Flexibility in Flexible Manufacturing System

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August 12, 2005

Abstract

We investigate flexible manufacturing system (FMS) by using the spatial price discrimination framework of Pal (1998). We endogenize flexibility of the production system. Röller and Tombak (1990) have already discussed the model where firms choose whether or not to adopt FMS and showed that the private incentive for adopting FMS is insufficient for the maximal welfare. We consider the situation in which firms have already adopted FMS and can increase flexibility of producing variants at the cost of increasing production costs of the basic products. We find that, in contrast to Röller and Tombak (1990), private incentives for increasing flexibility are excessive from the normative viewpoint.

JEL classification numbers: L13, R32

Keywords: FMS (flexible manufacturing system), spatial price discrimination, production substitution

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