Organizational structure and technological investment

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Abstract

We analyze firms’ decisions to adopt a vertical integration or separation, taking into account the characteristics of both the final good competition and the R&D process. We consider two vertical chains, where upstream sectors conduct R&D investment. Such investment determines the production costs of the downstream sector and has knowledge and R&D spillovers on the rivals’ costs. In a general setting, we show that the equilibrium organizational structure depends on whether the situation considered belongs to one of four possible cases. We study how final good market competition, spillover, and incentives in innovation interact to determine the equilibrium vertical structure.

JEL Codes: L22, L13, O32, C72.

Keywords: R&D, Vertical separation, Market structure, Spillover

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