License or entry with or without license in duopoly

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Abstract

We consider a choice of options for an outside innovating firm to license its new cost reducing technology to an incumbent firm or to enter the market with or without license. Under linear demand functions the results depend on the form of cost functions. When the cost functions are linear, if the innovation is not drastic, license without entry strategy is the optimum strategy for the innovating firm; if the innovation is drastic, both of entry without license and license without entry strategies are the optimum strategies. When the cost functions are quadratic, so long as the innovation is not so drastic, entry with license strategy is the optimum strategy for the innovating firm; however if the innovation is very drastic, license without entry strategy may be the optimum strategy.

Keywords: entry, license with or without entry, duopoly, innovating firm, incumbent firm *Journal of Economic Literature Classification:* D43, L13.

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