

Incentive to Invest in Open Source Projects: Impact of Asymmetry

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December 12, 2007

Abstract

How does the firm's choice to invest in OSS depend upon its strategic market position relative to its rival? The aim of this paper is to study the firms' incentives to integrate OSS developments in their proprietary software. The model considers asymmetric duopoly game in which firms may choose to improve the quality of their software. They face decision regarding open source. The strategic situation is that investment in OSS is profitable because it leads to a reduction of firms' coding costs. On the other hand, it involves two negative effects. First, the part of source code developed under open source regime is common to both firms. Second, coding costs reduction may increase price competition in the software market which decreases the firms' profits. We describe the relation between these opposite effects and the identity of the firm investing in OSS.

Keywords: Open Source Software; Spillover; R&D; Asymmetry

JEL classification: L13, L17, O3.

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