Intellectual Property Rights Protection and Enforcement in a Software Duopoly

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Abstract

We study the economic impacts of the interaction between a regulator’s Intellectual Property Rights (IPR) protection policy against software piracy on the one side and the forms of IPR protection that software producers may themselves undertake to protect their intellectual property on the other side. Two developers, each offering a variety of different quality, compete for heterogeneous users who choose among purchasing a legal version, using an illegal copy, and not using a product at all. Using an illegal version violates IPR and is thus punishable when disclosed. If a developer considers the level of piracy as high, he can either introduce a form of physical protection for his product or introduce a protection in the form of restricting support and other services to illegal users. The quality of each developer’s product is exogenously given, and the developers compete in prices. We examine the above issues within the framework of Bertrand and Stackelberg competition while the monopoly set-up serves as a point of reference.

Keywords: Vertically differentiated duopoly, Software piracy, Bertrand competition, Private and public intellectual property rights protection.

JEL Classification: D43, L11, L21, O25, O34.

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