ABSTRACT

Implications of Software Piracy on Social Welfare

by

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This study analyses the effects of software piracy protection policies on welfare of producers and consumers. In the first part of the study we discuss the importance of intellectual property rights for economic development and focus on the intellectual property protection in Turkey regarding software piracy. In the second part we develop a theoretical model to analyse the welfare effects of software piracy protection policies. In a set-up with two price-setting, profit-maximizing firms and a government, we investigate the optimal level of prices, monitoring rate and penalty that maximize the social welfare. First, we derive the analytical results and then run a simulation to find the industry equilibrium. We show that under weak protection policies, firms charge monopoly prices at the expense of minimized consumer surplus. This leads to underutilization. On the other hand, if the government sets deterrent levels of monitoring and penalty, firms charge competitive prices, and every consumer buys one of the software packages. We also show that the government can choose among a set of deterrent levels of monitoring and penalty that not only eliminate software piracy but also create room for the government to redistribute welfare among the agents.