

# *Do Patents and Trade Secrets Foster or Harm Innovation? Experimental Evidence*

**Stefan Bechtold, Lea Cassar & Holger Herz**

Despite increasing empirical research on intellectual property regimes, the interaction between competition, intellectual property protection and innovation is still an open field for research. Theoretically, it has been shown that, depending on the structure of the analyzed game, innovation patterns in equilibrium may be increasing or decreasing in competition or exhibit an inverted U-shape. Due to severe endogeneity problems, the empirical knowledge of the interaction between competition and innovation is still very limited. In this project, we propose to use experimental methods to shed some light on the relationship between competition, intellectual property protection and innovation. In particular, we investigate the impact of competition and intellectual property protection on innovation in an environment in which products and innovations can be observed and easily imitated by other firms. On the one hand, competition reduces the incentive to innovate because it reduces the potential of the innovator to internalize her investment. On the other hand, by observing what other firms do, innovation occurs faster because of learning effects and the permanent need to escape competition. The overall effect is ambiguous. In a laboratory experiment, we can investigate these effects and test under which conditions competition is good for innovation. We then investigate how the results are affected when introducing various intellectual property regimes, such as patents and trade secrets.