

**Information should not want to be free:  
Dynamic Innovation, Patents, and Costly Imitation \***  
**Jorge Andres Ferrando Yanez**

Why do firms in technologically more dynamic industries patent less and cross-license more? Is this good for society? We compare patent protection to costless diffusion of innovations using a continuous time dynamic model of innovation with stochastic imitation in which firms undertake original AND imitative R&D. Patents reduce the socially optimal pace of original innovation and incite firms in more dynamic industries to cross-license. However, the social cost-benefit analysis of imitative R&D does not always balance against patents, so crosslicensing agreements are not necessarily good. We determine the conditions under which firms' preferences regarding intellectual protection coincide with social objectives.