

Intellectual Property, Competition, and Growth: An Introduction

Roberto Cellini - **Guido Cozzi***

Università di Catania

Università di Macerata

This paper introduces the monographic issue of Rivista di Politica Economica on "Intellectual Property, Competition, and Growth". It presents the twelve contributions selected after a Call-for-Papers. The contributions deal with different facets of the protection of intellectual property rights and analyse micro- and macro-economic consequences of different degree of intellectual property protection, especially as concerns firm competition and macroeconomic growth performance. [JEL Classification: O31, O34, D60, G22, C22]

The knowledge of new products and processes is likely the most important key in the current competition among firms (and nations). However, the nature of knowledge, that is, the extent to which knowledge can be considered as a private rather than a public good, shapes the decisions of firms concerning several variables, like production, research efforts, localization, as well as the choices of Parliaments, policy makers, and Authorities concerning the protection of the results deriving from individual and collective research.

The definition of property rights on intellectual findings is an important element not only with respect to the microeconomic decisions of firms and researchers, but also with reference to the macroeconomic performance of nations.

*[<cellini@unict.it>](mailto:cellini@unict.it); [<cozzi@unimc.it>](mailto:cozzi@unimc.it)

As a matter of fact, institutional frameworks and regulation on such issues are very different across countries. Moreover, the continuous disclosure of new technological possibilities represents a real challenge for legal systems and asks for significant modifications of national laws and international treaties.

The protection of the appropriability of the results of knowledge-enhancing investments, with its different micro- and macro-economic aspects, can be analysed from many perspectives.

The articles in the present monographic issues of *Rivista di Politica Economica* are selected after a Call-for-Papers. These articles provide a clear demonstration of the complexity of the themes at hand, and show that the economic outcomes from different institutional designs of intellectual property rights can be — and they are indeed — markedly different.

In the first contribution, Pia Weiss shows that the introduction of a patent law can have different effects on the general welfare of a country, since beneficial and/or detrimental effects depend on the probability that a domestic firm wins a race for patent, and such a probability, in turn, depends on the patent protection.

Antoine Bureth, Rachel Levy, Julien Pénin and Sandrine Wolff, in the second contribution, focus on the role of patent as a strategic device in competition: the Authors claim that, beyond the traditional motivations for firms to apply for a patent, there is an additional rationale, namely the role of patent as a tool to manage collaboration, coordination, or exclusion among actors of innovative activities; such a role is also investigated in a case-study in biomedicine.

The third article, by Gustavo Olivieri and Laura Marchegiani, investigates the antitrust law in influencing the dynamics of a specific segment of the information-technology market, specifically the so-called open source software. It also studies the reverse influence, that is, the effects of technological development in open source software upon the necessity of new instruments for antitrust laws.

The protection of intellectual property rights often calls for legal actions. The paper of Christian Ben Lakhdar studies the social costs of such litigations and investigates the possible effectiveness

and efficiency of litigation insurances. The issue is of current interest, given that the European Commission is working at the development of litigation insurance schemes. However, the analysis leads to the conclusion that such schemes are far from giving clear-cut results in terms of social welfare.

The three subsequent papers deal with industrial espionage. Acquiring secret information and using it can give permanent advantage to (spy)-firm; at the same time, this possibility represents a threat, that can hamper significantly the innovation activity and can affect heavily the behaviour of firm concerning R&D activity.

Carmelo Parrello presents a positive model to study the macroeconomic implications of espionage activity in a framework in which the R&D employment of firms is constituted by two types of researchers: inventors and spies.

Francesco Schettino analyzes the role of the US anti-spying Acts on R&D patent dynamics: empirical evaluation suggests that the acts have been really effective in influencing the R&D efforts in “new” industries.

Guido Cozzi and Angelo Pietrosanti provide evidence documenting that the situation is very heterogeneous across European countries; however, no European country has a law comparable to the US, as concerns the punishment of spying activities. Civil and criminal sanctions against spying are really soft in Europe; this leads to conclude that the protection of intellectual findings is rather poor in Europe as compared to the US, entailing a serious weakness of the European research environment.

Two papers with a clear Schumpeterian flavour follow, to analyse specific consequences of competition based on intellectual investment aimed at innovation.

Carmelo Parelo and Luca Spinesi show that the patent infringement may affect wage inequality (beside growth performance); the theoretical links are clear: intellectual property rights enhance human capital accumulation, and hence increase the skill premium and — as a consequence — the wage inequality.

Alberto Bucci’s paper derives an inverted U-shaped relationship between product market competition and growth performance. He points out that more market competition not only affects the profit

incentive to R&D, but also leads to changes in the distribution of labour across sectors, with different effects on the profitability of R&D and a non monotonic effect on the macroeconomic growth performance.

Daya Shanker analyses the Agreement on Trade Related Aspects of Intellectual Property Rights, especially as concerns their patenting provisions. The article discusses some measures able to lessen the abuses inherent in patenting monopoly and the use of competition policy as a tool to deal with such abuses.

The last two papers focus on the collective property rights, especially in the field of “culture-based” goods and “traditional-knowledge” goods.

Roberto Cellini, Tiziana Cuccia and Walter Santagata discuss the possible effectiveness and efficiency of the introduction of collective trademarks to protect social knowledge and analyze the role of such trademarks in the development of local districts based on idiosyncratic know-how.

Stefania Lionetti discusses why and how negotiations based on mutually agreeable terms can help the economic development, and stresses that such agreements are particularly important to promote trade among nations with different cultures and traditional knowledge.

More generally, several reasons ask for international agreements concerning intellectual property rights.

Innovative ideas, intellectual research, theoretical results are increasingly important in the present age. Advances in technology, joint with the removal of trade barriers, have made imitation and reproduction very easy; this holds both for material goods and for intangible ideas. Different legislations across countries mean important distortions in cost and benefits associated to genuine R&D, to spying activity, to copying acts.

A global governance of precise definition of property rights of such intangible items is a pre-condition for markets to work.