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The controversy about appropriate level of intellectual property rights protection.

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Abstract

Intellectual property rights protection encourages national intellectual potential and therefore influences economic growth and development. The importance of intellectual property protection can't be overestimated but the optimal level of this protection is still discussed in economic literature. Paper tries to explain the main problems connected with searching for "optimal" protection level and therefore focuses on such issues as: the specific features of intellectual property as intangible resource, the influence of intellectual property rights protection on developing countries and the issues connected with the strength of patent regime.

Keywords: Intellectual property rights protection, Intangible resources, Developing countries

1. INTRODUCTION

This paper outlines some of the issues related to intellectual property rights (IPRs), necessity of their protection and problems connected with specifying the appropriate level of this protection. It provides a short overview of what IPRs are, how they are governed, what determines countries' IPRs regimes and lists main international Agreements which established current protection regime, then shows and explains the roots of necessity of intellectual property rights protection and gives a short overview of different opinions which can be found in modern economic literature. Then discusses the main controversies resulted from the protection of IPRs which are connected with the specific features of intellectual property as intangible resource, the influence of IPRs protection on developing countries and the issues connected with the strength of patent regime.

The basic message is that IPRs imply complex trade-offs for individual countries, especially developing countries and, so far, economic models and empirical investigations have not been able to determine the "appropriate" or "optimal" IPRs regime. However, can be useful in evaluating some of the economic implications of IPRs protection.

2. THE OVERVIEW OF INTELLECTUAL PROPERTY RIGHTS

According to World Intellectual Property Organization (WIPO) intellectual property (IP) refers to such creations of the human mind as inventions, literary and artistic works, and symbols, names, images, and designs used in commerce. In economic literature IP is divided into two main

categories: industrial property and copyright¹. Both of them are equally as valuable since the ramifications of not protecting these assets can be serious. Intellectual property has three customary legal domains: copyright (author's rights), patent, and trademark. Various legal regimes have evolved over time, each of which, to different degrees, recognizes rights of ownership in a particular form of intellectual subject-matter under specific conditions for designated periods of time.

Intellectual property rights (IPRs) are usually defined in economic terms as the rights to sell and use these creation of human mind. They are treated as the important part of firm's intangible assets together with customer goodwill, specific skills of employees, knowledge imbedded in the organization or good management practices. IPRs are considered as policy tool to align the private returns to innovative activity with its social return, it means its benefit to society and thus to generate socially optimal incentives for private-sector innovative activity [United Nations Economic Commission for Europe 2011, p. 7].

Despite the existence of many nationally-based regulations strictly connected with the intellectual property rights protection, there are many factors which contribute to differences in IPRs protection level among countries. For example, the existence of internet and digitalization possibilities cause that national rules do not necessarily provide satisfactory protection. Internationally-based legislation can help to clarify cross-border issues, as well as develop global IPR standards. Over the years, there has been a long tradition of international IPR harmonization in order to ensure that right protected by IPR is respected globally. The importance of intellectual property was first recognized in the Paris Convention for the protection of industrial property (1883) and then in the Berne Convention for the protection of Literary and Artistic Works (1886) administered by the World Intellectual Property Organization (WIPO)². Among other important international agreements there are: the Universal Copyright Convention (UCC)³ and the TRIPS Agreement⁴ under the patronage of the World Trade Organization. TRIPS has established homogeneous minimum standards of protection among all WTO members, introducing two basic

¹ Copyright and rights related to copyright mean rights granted to authors of literary and artistic works, and the rights of performers, producers of phonograms and broadcasting organizations. The main purpose of protection of copyright and related rights is to encourage and reward creative work. Industrial property includes the protection of distinctive signs such as trademarks and geographical indications, industrial property protected primarily to stimulate innovation, design and the creation of technology. This category includes: inventions (protected by patents), industrial designs and trade secrets.

² The Berne Convention provides the means for reciprocal protection to foreign works according to the same rules as national content, no matter to what level of protection exists in that country.

³ The Universal Copyright Convention of September 6th 1952 as revised at Paris on July 24th 1971.

⁴ "The Agreement on Trade Related Aspects of Intellectual Property Rights" is part of the final act of the Uruguay Round of multilateral trade negotiations in 1994. According to the TRIPS Agreement, all WTO countries are obliged to adhere to the rules and principles of the Berne Convention and the fundamental rules of the Rome Convention (The International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting organizations, signed at Rome on October 26th 1961). More about the TRIPS Agreement can be found at: <http://www.wto.org>

principles in IP management: the national treatment and the most favored nation treatment⁵. [Coriat, Primi, Cimoli 2008]. The United States and the EU have also brought IP protection into bilateral trade agreements with developing nations, securing “TRIPS Plus” agreements, with IP protection more demanding than the minimum standards of TRIPS. [Vivas-Eugui 2003]

It is worth to mention that the intellectual property rights are also outlined in Article 27 of the Universal Declaration of Human Rights, which provides for the right to benefit from the protection of moral and material interest, resulting from authorship of scientific, artistic or literary productions [WIPO 2015].

The existence of many international regulations usually cause many obstacles and problems. The ongoing revolution in information and communication technologies has significantly reduced the costs of creating, processing and transmitting knowledge, both nationally and internationally. Also the pace of innovation accelerated. Additionally modern national economic policies are often focused on different goals, countries stages of development are differentiated and national economies play different roles in the international trade. All these factors create new challenges for IP regimes and policymaking.

3. THE NECESSITY OF INTELLECTUAL PROPERTY RIGHTS PROTECTION

In literature there are six main reasons explaining the necessity of safeguarding intangible assets: theft, loss of reputation, loss of income, asset devaluation, differences in national regulations between countries and prevention others from being ripped off (by protecting intellectual property, it is possible to help others to avoid scams and fake products).

The Global Intellectual Property Center (GIPC), the affiliate of the U.S. Chamber of Commerce enumerates the reasons of IP importance in American economy [GIPC 2015]:

- it creates and supports high-paying jobs,
- drives economic growth and competitiveness,
- protects consumers and families (strong IP rights help consumers make an educated choices about the safety, reliability, and effectiveness of their purchases, enforced IP rights ensure products are authentic, and of the high-quality that consumers recognize and expect, IP rights foster the confidence and ease of mind that consumers demand and markets rely on),
- helps generate breakthrough solutions to global challenges (for example: IP-driven discoveries in alternative energy and green technologies will help improve energy security and address climate change)
- encourages innovation and reward entrepreneurs (risk and occasional failure are the lifeblood of the innovation economy. IP rights incentivize entrepreneurs to keep pushing for new advances in the face of adversity, IP rights facilitate the free flow of information

⁵ TRIPS setting mandatory minimum standards for national protection of intellectual property requires states to implement a common and often expanded set of intellectual property protections. It also imposes enforcement measures, including potential trade sanctions against nations that do not comply with these standards. According to these principles, each WTO member is required to treat nationals of other member states at least as well as its own nationals, and to treat all other member states on an equivalent basis in relation to the protection of intellectual property.

by sharing the protected know-how critical to the original, patented invention. In turn, this process leads to new innovations and improvements on existing ones).

According to GIPC intellectual property rights protection is shared by a broad coalition of interests by all sectors of industry and by all market agents: labor organizations, consumer groups, and other trade associations [GIPC 2015].

For a long time, international discussions about intellectual property have been based on a premise that protecting intellectual property rights is beneficial to economic development and social good. This consensus arose from the understanding that intellectual property rights provide the necessary incentive to spur innovation in the arts and sciences, thus driving social and economic development. As a result, the World Intellectual Property Organization (WIPO) focused on technical matters, such as establishing reciprocal intellectual property protection between nations and harmonizing intellectual property laws. [Schultz, Walker 2005].

In the United Nations Industrial Development Organization (UNIDO) review of almost 200 studies on intellectual property rights and economic growth, R.Falvey, N.Foster and O.Memedovic have proved overwhelming evidence that strong intellectual property rights protection generates economic growth.[Falvey, Foster, Memedovic 2006]. They claimed that strong IPRs were an essential foundation for long-term growth. Moreover, this happened through a variety of welfare-enhancing channels, including technology transfer, tacit skill acquisition, education, job creation, wage growth, and foreign direct investment. R.Falvey, N.Foster and O.Memedovic also underlined that the impact of this protection depended on the country's level of development. This powerful result hold true both for developed and developing countries. For high-income countries, their analysis concluded that strengthening IPRs led to growth through increased innovation and technological diffusion. For middle-income countries, they established that a more strong and healthy IPR environment boosted domestic innovation. Although stronger IPR protection would prevent imitation, domestic firms benefited from technology diffusion through foreign patenting and international trade, all of which usually led to economic growth. Finally, for low-income countries, the authors concluded that increased IPRs protection encouraged growth [Ibid].

In a 2010 study on IP, innovation and U.S. competitiveness, N.D. Pham analyzed the benefits of IP-intensive industries [Pham 2010]. Pham established that IP-intensive industries paid higher wages, generated more sales and value-added, and resulted in more exports, R&D spending and capital spending. In contrast to the UNIDO analysis, Pham's study clearly demonstrated the benefits of robust intellectual property protection for individual firms, industries, and employees. Beyond these benefits, robust intellectual property rights were treated as an essential component of a nation's economic infrastructure and a prerequisite for attracting Foreign Direct Investment (FDI). Also the recent study by R.J.Shapiro and A. Mathur reviewed the economic impact of FDI on growth and development in developing nations. [Shapiro, Mathur 2014]. According to them FDI had strong, positive effects on a country's growth, productivity and incomes. These positive effects reflected not only the direct benefits from applying the technologies and business methods brought in through FDI, but also spillover effects from domestic workers learning new skills and domestic companies adopting the new technologies and business methods. [Ibid]. In addition to increasing Foreign Direct Investment, stronger IP regimes attract greater spending on research and development (R&D) [Grueber, Studt 2013].

To sum up, many economists treat strong intellectual property rights as a necessary prerequisite for economic growth and development. Proponents of strong intellectual property rights claim that it fosters innovation which facilitates economic growth and development. The analysis of benefits of intellectual property rights is well established in economic literature and impossible to deny. This protection results in greater prosperity of nations, industries, firms and individuals.

4. CONTROVERSY OVER IPR PROTECTION

Despite many proponents of strong intellectual property rights protection, in contemporary economic literature there are also many views which question the necessity of strong protection and recommend weaker protection or even lack of it. Especially after TRIP agreement the number of critics has increased.

The current explosion in controversy over the protection of ideas seems to have at least three main causes [Foreign Affairs 2002]:

- brainpower drives the modern economy: there are more demands to own ideas and more demands for cheaper access to these ideas.
- technological change has made it harder to protect ideas, more people know about new ideas and want to use technology to get access to intellectual property.
- globalization has made it easier for intellectual property to spread to parts of the world with weaker protection of ideas.

Nowadays controversies over IPR protection are mainly connected with the: the specific features of intellectual property as intangible resource, the influence of IPRs protection on developing countries and the issues connected with the strength of patent regime.

Property rights in tangibles are a response to limitation of goods. Scarcity is opposed to abundance and arises where different economic units (individuals, firms, etc.) want to use a single good in ways which cannot all simultaneously be indulged in. In economics it is hardly worth establishing property rights on abundant commodities: all can use them without exhausting the supply. IP rights differ from physical assets because they can be used many times without diminishing. That means, for example, that the same IP can be licensed to a number of different licensees each based on a specified geographic region. [IP Australia 2015]. There are inherent tensions between IPRs and competition. In a market economy, competition is understood as generally important and indeed essential to cut market distortions, induce efficiency in use of resources, prevent monopoly or oligopoly, maintain prices at fair levels, as low as possible, prevent excessive or monopoly profits and promote consumer interests and country's welfare. The existence of intellectual property rights protection creates the artificial scarcity. This term describes the limitation of items even though either the technology and production capacity exists to create an abundance. The intellectual property law creates scarcity where otherwise there would not be. The most common cause is monopoly pricing structures, such as those enabled by intellectual property rights. The inefficiency associated with artificial scarcity is formally known as a deadweight loss. In practice IPR regimes cannot be tailored so precisely and therefore the level of protection afforded in practice is necessarily a compromise [CIPR 2002].

The next controversial issue is connected with the influence of IPR on economies of developing countries. Nowadays many economists, especially dealing with developing countries, assert that intellectual property rights may impede research and innovation, distort research priorities,

interfere with economic development in the developing world, and raise the cost of a host of items needed (especially pharmaceuticals, software, and educational materials). While there is strong evidence that robust intellectual property rights protection fosters economic growth and development in well-developed countries, the role of strong IPRs in developing countries is not so clear and obvious. Especially results of TRIPS Agreement generate much controversy about economic implications of strict IPRs protection for developing countries. Developed countries, which host the world's largest intellectual property-producing industries, are the key advocates for comprehensive minimum standards of protection and enforcement of IPRs. By contrast, developing countries are mostly only consumers of intellectual property, and therefore claim that stronger standards of protection would serve to limit access to new technologies and products, thereby undermining poor countries' development prospects. Not surprisingly, the TRIPS Agreement remains one of the most controversial agreements of the WTO. Proponents of the Agreement claim that stronger IPRs stimulate creative industries in developing countries and promote foreign direct investment, with an overall positive development outcome. Opponents of TRIPS argue that the Agreement hinders developing countries' access to new technologies, and therefore lead to higher prices and rent transfers from poor to rich countries. Even some researchers claim that strong IP rights are an obstacle to economic development in developing countries [Schultz, Walker 2005]. The TRIPS Agreement requires all signatories to develop strong intellectual property protections. Opponents of the strong IPRs protection point several problems. While the patent system appears to have stimulated the development of new products and technologies in a few sectors, in other sectors patents are often considered to have anti-competitive effects and may even slow the pace of innovation [Tansey 1999]. Strict intellectual property models appropriate for advanced market economies are likely to disadvantage less developed countries. Despite the large number of developing countries decided to accede to TRIPS so as to attract foreign investment and to be considered eligible for technology transfers, developing countries generally believe that it is not in their economic interests to implement stronger patent laws. This is because intellectual property protection usually increases the cost of development. In the global economy, industrial countries currently hold 97 per cent of all patents worldwide. More than 80 per cent of the patents granted in developing countries belong to residents of industrial countries, usually multinational corporations from the most advanced economies. Also 70 per cent of global royalty and licensing fee payments are between parent and affiliate in multinational corporations [United Nations Development Program 1999, p.6]. This means that under strict enforcement of intellectual property law, the patents owners are awarded and resulting payments for the use of these technologies will primarily benefit foreign multinational corporations and not stimulate local research and innovation [Carroll 1995]. Some authors notice that there are large and growing patent rents transferred from developing to developed countries. Because the patents are owned by foreigners, local researchers and enterprises are blocked or restricted in their use of the patented materials. Local industries will also find it difficult or even impossible to produce similar products. In terms of effect on competition, the situation gives monopoly rights to foreigners, and local enterprises are placed in a situation in which they face high obstacles to compete or competition doesn't exist at all [Chang 2004].

The strength of a patent regime is another controversial issue connected with intellectual property right protection. The trade-off between the cost of having market power which is granted by intellectual property rights and benefit of the innovation incentive is not likely to be uniform across different economic development levels and means that "one size fits all" rule is far from

optimal and impact of further strengthening IPRs depends heavily on the degree of IPR protection currently implemented in a country. Some empirical works looking at variation in the strength of patent protection over time in a cross-section of countries and confirms that the impact of changes in the patent regime depends inter alia on the level of economic development and notice the positive relationship between patent strength and R&D in countries above a certain level of economic development [Lerner 2002, p.221-225]. Park and Ginarte found that the strength of IP rights was positively associated with investment and R&D in countries with above median income but not for the less-developed countries [Park, Ginarte 1997, p.51-61]. Also Qian (2007) showed that stronger patent protection encourages more R&D in high-income countries, but only up to a certain level of patent protection, above which further strengthening of patent protection reduces R&D. [Qian 2007, p.436-453]. Additionally Greenhalgh and Rogers suggests that excessive application of patents blocks competition and create additional payments connected with so-called “patent thickets” (firms file or acquire patents in order to make it more difficult for potential competitors to enter a given market) [Greenhalgh Rogers, 2007, p.541-567]].

Another issue connected with patents deals with dimensions of patent regimes, especially with length of patents, the breadth of patents and the range or scope of innovation covered. Many theoretical models suggest that broad but finite patent improve diffusion, but long-lasting and narrow patents can lower R&D costs by encouraging effort toward larger innovative steps. But it is still impossible to specify the balance between these two objectives because this balance can be different for different countries, industries and firms and it depends on the nature of product market and implemented technology. [Gilbert Shapiro, 1990 p.113-130].

5. CONCLUSIONS

The paper tries to explain the necessity of intellectual property protection in contemporary world and shows some of controversies connected with searching for appropriate level of this protection. The paper shortly discussed such issues as: the specific features of intellectual property as intangible resource, the influence of IPRs protection on developing countries and the issues connected with the strength of patent regime. The list of problems is much wider but these seem to be important nowadays.

The protection of intellectual property rights is widely considered to be part of economic policymaking, although economic theories of growth and development have so far ignored, or only peripherally considered, the role of intellectual property rights policy. Most analysts shows that the impact of IPRs protection depends on conditions such as educational performance, openness to trade and foreign investment, and business related regulations. The latest research show that the role of IPRs can't be longer ignored and this role will be growing in the future. Therefore the problem of appropriate level of IPRs protection becomes important both for policymakers and scientists. Stronger protection of IPRs involves trade-offs for a country. Costs cause by increased market-power of IPRs holders and by the administration and enforcement of these rights should be compared with benefits such as the additional incentive to invest in R&D and the attraction of foreign direct investment. The design of the appropriate IPRs regime (the breadth, strength, and length of protection) should consider these trade-offs.

The present IP system, both on international and national level, should evaluate towards the finding appropriate level of protection and optimal IP system.

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