

## TRADEMARK APPLICATIONS IN A SECTORAL APPROACH

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*The economic roles of the Intellectual Property Rights (IPRs) are one of the key mysteries of the economic theories. At the beginning of the 1760s a sustained and rapid growth in per capita income occurred all over the world and since then the broad history of economic institutions has still quite important. This research paper relies on the conceptual framework of IPRs. However, the academic literature has claimed that the presences of these institutions are essential elements of a well-functioning economy, but intellectual property has come to mean not only the right to own and sell, but also the right to regulate its use. Moreover several unexploited dilemmas have still remained in practice. In order to support the theoretical insights we inspect to overview the trademarks growth tendencies in various OECD countries. In this perspective we followed a specific taxonomy of the traditional Nice Classes (NCL) to identify the distribution and the growth changes of these property right applications in a specific sectoral approach. Besides determining the differences with some comparative statistics in the branches, we could also demonstrate the economic importance of trademark applicants that place on the protection of brands in the service-oriented industries. However, there was falls in due to the last economic crisis; it seemed to follow a persistent and substantial growth path again. In this sense, we could also suggest the better valorization of IPRs that must be considered in a context to facilitate SMEs' access to the benefits of globalised markets in these industries.*

*Keywords: property rights, sectoral approach, trademarks*

*JEL Codes: D23, I23, O34*

### **1. Introduction to the economic role of property rights**

One of the essential facts in the history of economic growth was the Industrial Revolution in Britain. At the beginning of the 1760s a sustained and rapid growth in per capita income occurred all over the world. Although Adam Smith (1759) was the first pioneers to analyse how i.e. norms, beliefs and culture etc. affect this economic performance, the role of institutions has only developed in recent decades. Recently some institutional economists, such as the Nobel-prize winner Douglas C. North in 1993, claimed that "institutions matter" and since then the broad history of economic institutions has still quite important (North, 1990).

The economic roles of the Intellectual Property Rights (IPRs) are one of the key mysteries of the theories. Basically, the innovation (R&D) without trans-

action costs might not be sustained by inventors after they have created their inventions, unless they have some expectation of being able to capture the gains of efficient allocation in the form of profit (Coase, 1960). Patents and copyrights are legal form of these mechanisms which "... grant investors monopoly power in order to allow them to obtain a return from their inventions." (Jones, 2001:86). These IPRs attempt to use legal systems to influence the degree of excludability of ideas. Essentially, it might be quite easy for someone to "copy" an invention without any trademarks and the competition arising from this imitation eliminates the incentive for investors to create new ideas in the first place.

However, while the mainstream academic literature has earlier claimed that the presence of IPRs leads to better economic growth and they are essential elements of well-functioning economies, others such as Boldrin and Levine (2002) argued that new ideas should be protected and available for sale. Hence "intellectual property" has come to mean not only the right to own and sell, but also the right to regulate its use. In this view, these institutions create socially inefficient markets and they might be better defined as "intellectual monopolies".

However, outside these theoretical debates, scholars are commonly interested in examining the impact of these formal institutions on economic performance. Nevertheless, there is currently still some disagreement about whether strengthening trademarks enhances the international competitiveness of industries. Since now, little evidences have been presented because of the limited measurement opportunities and empirical studies have not been able to evaluate the impact of IPRs on economies, such as trademarks, copyrights etc. Gould and Gruben (1996) focused on how the effect of trademarks depends on the degree of trade openness of different countries; while Ginarte and Park (1997) emphasized that patent rights could stimulate factor accumulation and directly influences economic growth. In a related study, focusing on manufacturing industries in the OECD countries, Park (2003) found that both labour productivity and R&D expenditure increased with IPRs. In a larger sample of countries Kanwar and Evenson (2003) claimed that stronger patent rights were associated with higher R&D intensity (the ratio of R&D expenditure to GDP). Hu and Png (2012) demonstrated that more patent-intensive industries responded to stronger patent laws with higher growth, which resulted in increased GDP per capita.

The main purpose of this working paper is to support the theoretical insights to the economic role of IPRs and also overview the growth tendencies of trademarks in various OECD countries. In our estimations we follow a specific taxonomy to identify the changes of applicants' distribution in different branches over the previous decades.

## **2. Trademark applications in a sectoral approach**

According to the definition of the OECD trademark may be registered under intellectual property legislation, such as the Patent or the Trademark Act that may be applicable. The trademarks may often become equated with the

product itself and may be one of the main sources of the competitive market advantages (OECD, 2015).

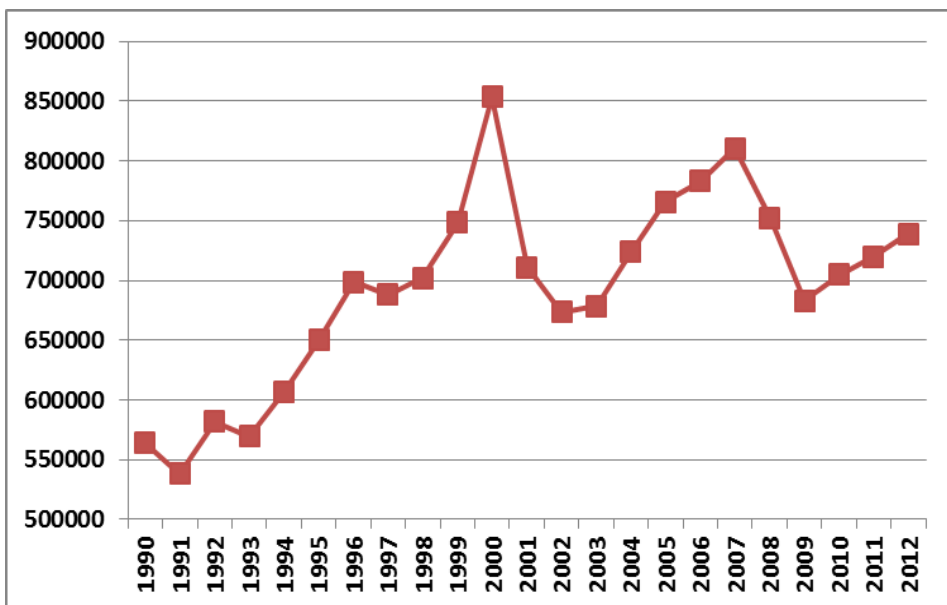


Figure 1: The amount of trademark applicants in the OECD countries, 1990-2012

Source: own calculations based on WIPO (2015)

The total number of classes specified in trademark applications in the examined 14 OECD countries<sup>1</sup> grew by 23% from 1990 to 2012. However, in 2000 was the largest amount of trademark applicant, the strong growth in applications worldwide was stopped. After the falls in due to the crisis of 2000 and 2007 the trademark applicants seemed to follow a persistent and substantial growth path again (see Figure 1.).

Many offices use the Nice Classification (NCL) to classify trademark applications. This international form of classification for the purposes of registering marks was established under the Nice Agreement and divided into 45 classes for goods and services. The breakdown of applications by class offers insights into the relative importance of trademarks for different industries.

<sup>1</sup> AUR, AUS, DEN, CZE, FIN, GER, ITA, JPY, NED, SLO, SPA, SWE, UK and the USA.

**Table 1:** The distribution of trademark applications by top 10 Nice Classes, 2012

Rank	Class	Description	Share(%)
1	35	Advertising and business management	9.4
2	25	Clothing	7.0
3	9	Scientific, photographic, measuring instruments; recording equipment; computers and software	6.7
4	41	Education, entertainment, and sporting activities	5.6
5	5	Pharmaceutical preparations, baby food, dietary supplements for humans and animals, disinfectants, fungicides and herbicides	4.6
6	30	Coffee, tea, cocoa, rice, flour, bread, pastry and confectionery, sugar, honey, yeast, salt, mustard; vinegar, sauces and spices	4.1
7	42	Scientific and technological services, design and development of computer hardware and software	4.0
8	3	Bleaching preparations and other substances for laundry use; cleaning and abrasive preparations; soaps, perfumery and cosmetics	3.5
9	16	Paper, cardboard and goods made from these materials; printed matter, photographs, artists' materials, typewriters, and plastic materials for packaging	3.2
10	43	Services for providing food and drink; temporary accommodation	3.0
		Remaining classes	48.7

Source: own calculations based on WIPO (2015)

The first 34 of the 45 classes indicate goods and the remaining 11 refer to services and the first top 10 classes accounted for just over half (51.3%) of all classes specified in trademark applications (Table 1.). Four of the top 10 classes related to services and the Service Class 35 of advertising, business management, business administration, and office functions etc. has occupied or shared the number one position since 2004 (Wipo, 2015). The highest ranked classes of goods were Class 25 (clothing, footwear, and headgear etc.) and Class 9 (scientific, photographic, measuring instruments, recording equipment, computers and software etc.).

The results of our analyses relating to the NCL classes by industries show that 11 service-related classes accounted for slightly more than one-third (34.2%) of all classes specified in applications in 2012. This is approximately

equal to the service class share for 2007 (see Figure 2.), thus demonstrating the continuous importance of applicants that place on protection of brands in service-oriented industries.

**Table 2:** The trademark applications by industries

Industry sector	Share (%)		
	2007	2012	Change
<i>Agricultural products and services</i>	14.5	16.0	1.6
<i>Textiles - Clothing and Accessories</i>	12.9	14.1	1.2
<i>Scientific research, Information technology, Communications</i>	14.6	13.8	-0.8
<i>Management, Communications, Real estate and Financial Services</i>	11.4	11.8	0.4
<i>Pharmaceuticals, Health, Cosmetics</i>	11.4	11.1	-0.3
<i>Leisure, Education, Training</i>	12.3	11.0	-1.3
<i>Construction, Infrastructure</i>	7.6	6.9	-0.6
<i>Household equipment</i>	6.3	6.5	0.3
<i>Transportation and Logistics</i>	6.0	5.6	-0.3
<i>Chemicals</i>	3.1	2.9	-0.2

Source: own calculations based on WIPO Statistics Database (2015)

This table also represents the distribution of trademark applications across various industries of the OECD economies. No specific categories seem to mostly dominate for trademark applications. Six of the ten groups each include more than 10 per cent of the total share of NCL classes, with agricultural products and services accounting for the highest share (16%) of the aggregated total as well as the highest percentage point change between 2007 and 2012. After five years than the last financial crisis of the world economy the distribution of trademark applications across industries has remained stable between 2004 and 2012.

### 3. Conclusions

According to the institutional economics the role of IPRs is one of the relevant determinants of economies. Although recently there have been serious theoretical debates, no clear consensus has yet emerged and several unanswered problems remained to explain the impact of these institutions.

The total number of classes specified in trademark applications in the examined 14 OECD countries increased from 1990 to 2012. However, there was falls in due to the economic crisis; it seemed to follow a persistent and substantial growth path again.

In this paper we had two objectives. The results of our analyses relating to the NCL classes by industries demonstrating the continuous importance of applicants that place on protection of brands in service-oriented industries

and the distribution of trademark applications across industries has remained stable till 2012.

As a consequence, the better valorisation of trademarks must be considered in a global context to ease the access of SMEs to knowledge markets. We can advise SMEs to enhance and protect the value of their intellectual assets. The economic benefits of IPRs are only gained through actions that enterprises take to ensure trademarks for their inventions of good or services (EC, 2012).

An additional research direction has also emerged in this study. We argue that, such as (Herczeg, 2009) and (Tóth, 2014) suggested, the changing financial and accounting environment might impact on the optimal capital structure and critical to enhance production ability in the competitive markets. Moreover, further researches, in accordance with the greating role of the SMEs' venture capital in a sectoral approach (see Becsky-Nagy-Fazekas, 2015), could be more fruitful.

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