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**MASTER THESIS
PROTECTION OF INTELLECTUAL PROPERTY RIGHTS IN
BOSNIA AND HERZEGOVINA**

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STATEMENT

I, Irena Tamindžić do hereby certify to be author of this master's thesis written under the mentorship of Professor Veljko Trivun, PhD. I herewith agree this thesis to be published on the websites pages of the School of Economics and Business, University of Sarajevo and the Faculty of Economics, University of Ljubljana.

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INTRODUCTION

Over the years, creation and use of products and services representing intellectual property rights (hereinafter: IPRs) has significantly increased. The term **IPRs** can be broadly defined as legal and institutional devices used to provide protection for creations of human mind, including inventions, literary and works of art as well as designs used in commerce. IPRs differ from physical goods by its specific nature. In other words, knowledge is regarded as public good, meaning that it can be made available to multiple users repeatedly in a non – rivalrous fashion, at a marginal cost which in the case of knowledge may be very low. As marginal cost related to distribution of knowledge is low, incentives to innovate diminish because inventor has no means to control results of his productive effort. Thus, the main problem with the establishment of the IPRs is creating scarcity where it doesn't formally exist. IPRs as a legal construction tend to solve this problem, by providing right holders with legal means to protect their rights, consequently providing them with greater opportunities to capitalize on their inventions.

However, as noted by Jones (2004) and Warsh (2006), new ideas embodied in intellectual property can contribute to technical progress with “disproportionate” impacts on economic growth. Because knowledge or an idea can be applied repeatedly in a non – rivalrous manner, bringing about big returns to scale, policy makers tend to be very motivated to change or adapt IPRs policies with the sole intention to promote and boost economic growth and development. Over the years concept of IPRs has significantly changed with countries creating completely new intellectual property systems or adapting the present systems in order to improve access to their system to the interested parties from abroad. According to Dutfield (2003a), evolution of countries' IPRs systems has been characterized by three important events:

- the widening of protectable subject matter,
- the creation of new rights, and
- the progressive standardization of the basic features of IPRs.

This worldwide process of IPRs reforms also includes developing and less developed countries, mainly motivated by international trade liberalization and economic transitions processes, in the case of former socialist countries. Majority of these countries undertook different obligations regarding IPRs protection put in front of them by various agreements predominately administered by the World Trade Organization (hereinafter: the WTO) and the World Intellectual Property Organization (hereinafter: the WIPO). These obligations require certain changes to be made in domestic laws and strength of the protection in the IPRs realm. By perceiving IPRs as a tool for boosting economic growth many of the countries introduce standards of protection unadjusted to their economic reality.

IPRs are actually vital part of social, cultural, and economic development, but they also can result to be a double – edged sword, if not created and implemented properly. Even though IPRs can stimulate economic growth and development, many studies suggest that strong IPRs may have a negative effect on developing countries because of the little, if any, research and development (hereinafter: R&D) and technological development, or in other words because R&D base needed for innovation is absent (Commission on Intellectual Property Rights (CIPR, 2002); Shapiro & Hassett, 2005). Shapiro and Hassett (2005) found that even if strong IPRs promote innovation, the benefits go primarily to those who develop them. Additionally, Horii and Iwaisako (2007) claimed that strengthening IPRs lowers growth in technologically deficient economies especially when it lowers imitation. Furthermore, IPRs protection guarantees, for a limited time, a monopoly right to reproduce a good and monopoly is always linked to a deadweight loss.

In majority of the less developed or developing countries policymakers are of opinion that IPRs alone will ensure economic growth and development. However, reality is that improvement of IPRs protection policy must be accompanied by improved performance in other areas of social, legal, cultural and economic systems. The strength of IPRs is directly related to other variables, such as institutional policy, enforcement policy, complexity of the related administration, coordination of the relevant institutions, etc. The best example is Bosnia and Herzegovina (hereinafter: BiH) itself which has fairly complete and appropriate legal framework for IPRs protection, various international conventions, bilateral and multilateral agreements in place, but yet it seems that IPRs protection system does not provide full nor efficient protection, nor does it do much to stimulate economic growth and development. In order to understand reasons behind this situation, this research study has been conducted to generate an overall picture of the BiH's IPRs protection system as well as the main factors impeding its successful functioning.

The subjects for the research in this paper are to determine and assess the most important factors influencing the protection of IPRs in BiH and to understand challenges facing BiH in protection and enforcement of IPRs. The study goes into various aspects of IPRs protection in order to assess, against the objectives put in front of BiH by the national legal system, as well as the international community, effectiveness and relevance of the measures undertaken, and their impact on the protection and enforcement of IPRs.

The foremost purpose of the study is to evaluate the perceptions of the stakeholders regarding different issues concerning protection of IPRs in BiH and to identify strengths and weaknesses in order to point out areas of strength and figure out potential areas of intervention that ought to be addressed by policymakers during any potential reform efforts.

The scope of the study will be to understand how BiH addresses and manages various aspects of its IPRs protection policy. The research problem originates from the premises that IPRs protection is a vital part of social, cultural, and economic development, but only

if properly structured and backed up by an effective protection, enforcement and institutional policy.

The research objectives of the study are to understand and answer the following questions related to the issue of IPRs protection:

- What is the perception of the respondents about the IPRs protection as the generator of economic growth? Is the IPRs protection itself sufficient to encourage economic growth in BiH?
- How effective are the current government strategies regarding the national IPRs enforcement policy and what activities could be undertaken in order to improve it?
- What is the perception of the respondents about the key factors pertaining to the work and activities conducted before the Institute for Intellectual Property of BiH?

The research methodology integrates both quantitative and qualitative methods. Generally, the thesis comprises two main parts, theoretical and empirical. The theoretical part includes literature reviews conducted to assess information and data on the subject through website search, internet search for e-books, electronic access to official publications and journals of different institutions posted on their respective sites. The theoretical part is covered by two major chapters, portraying important theoretical aspects of the researched subject matter.

The empirical part uses the questionnaire developed to obtain data on different subject matters related to IPRs protection in BiH. Primary and secondary data are used in the research process. The primary data is collected through the internet mediated questionnaires, administered to 200 stakeholders in the country through random sampling basis. Secondary data on the subject is collected through sources such as annual reports of the Institute for Intellectual Property of BiH, Property Rights Alliance, WIPO, Indirect Taxation Authority of BiH, etc.

The master thesis begins with the introduction intending to depict the research problem, the purpose and objectives of the research study, research methodology used in the process and the sequencing of chapters. The first chapter of the thesis highlights the most important theoretical aspects of the IPRs protection. It describes historic development of the IPRs concept, its economic foundations and the multiple and various effects it may have on social, cultural, and economic development.

The second chapter deals with the protection of IPRs in BiH. This is the core chapter where IPRs system of BiH is presented along with the problems and challenges country is facing in this specific realm. It highlights BiH's IPRs protection and enforcement policy, related legislation and institutions involved, in order to capture key factors impeding successful functioning of the system.

The third chapter refers to research study on “Protection of intellectual property rights in BiH”. It describes research methodology used in the research process. Furthermore it describes questionnaire, data collection, analysis, interpretation and subsequent evaluation of results.

The fourth chapter relates to possible suggestions, recommendations and potential areas of intervention that ought to be addressed during any potential reform efforts. The last part of thesis incorporates the conclusion highlighting the main problems rose in the survey as well as the specific solutions that could be applied in order to overcome the most important problems impeding creation of an effective system of IPRs protection.

1 INTELLECTUAL PROPERTY RIGHTS OVERVIEW

1.1 History of Intellectual Property Rights

Even before there was a formal legal definition of intellectual property, there were many attempts to control valuable knowledge and information by the individuals and groups who wanted to gain from its exploitation (May & Sell, 2006, p. 4). Although technological developments played an important role in the establishment and growth of the legal construction of IPRs, they are not the only factor as the idea of owning knowledge and information appeared much earlier. On the other hand, term intellectual property is quite young. Even though the term itself was likely in use by the mid – nineteenth century (Hesse, 2002, p. 39), in the first half of the twentieth century the term industrial property was used more often, until it was finally superseded in the second half of the twentieth century (David, 2000). For instance, term intellectual property appears only once in US federal court reports prior to 1900, and is absent in reports between 1900 and 1930 (May & Sell, 2006, p. 18). Over the years frequency of using the word substantially increased (at least in US courts), from only twice in the 1930s to over 800 times in the 1990s (Fisher, 1999).

It is said that history of IPRs is history in contestation. Each phase of the IPRs evolution contains factors withheld from the past as well as certain factors accommodated to fit the present. In order to see how IPRs have evolved to what they are today, brief history of IPRs will be presented in continuation.

1.1.1 Early Antecedents of Intellectual Property Rights

Perhaps the oldest way of exhibiting the information element was marking of goods. Humans have begun the practice of marking goods they produced or obtained in some other way, 6.000 years ago, even before first animals were domesticated. As Ruston (1955, p. 127) noted, although some of these marks were “undoubtedly trademarks in the modern sense ... marks denoting origin; others were clearly marks identifying goods with their

possessor”. This practice continued throughout the years and by the time of the Egyptian and Mesopotamian empires producers of the masonry used to mark their products along with the name of the present ruler as well as the owner of the building for which the products were used.

In the Greek city – states knowledge was starting to be regarded as something valuable which in certain measure created the opportunity for its eventual commoditization. The Sophists are thought to be the first group to earn their rewards through their teaching activities (May & Sell, 2006, p. 45). Mostly these (the teachings) were produced by the audiences and then copied by others as there was no technology of publication as such (Masterson, 1940). Critics of the Sophists often argued that by allowing their ideas to be set down in writing they lost control over who could read and subsequently benefit from their knowledge (Blank, 1985, pp. 18–19), implying that they didn't perceive knowledge as something that could be owned.

Poets on the other hand, who had clearly visible product of their creative thinking: the poem, had slightly different attitude toward the ownership. It was not uncommon to find in Greek culture from the sixth century B.C. onward poets who claimed to be authors of specific works and artists who signed their paintings or illustrations (Ploman & Hamilton, 1980, p. 5). Vukmir (1992, p. 129) considers marks (and signatures) on works of art as “reliable evidence of a recognition of the proprietary nature of artistic activity”, representing both “recognition of personal achievement and a warning of ownership”. But, although a contractual relationship between the poet and the purchaser existed and was included in the provision of poems, the idea that the poem itself was intellectual property, in a modern sense, is absent (May & Sell, 2006, p. 46).

Marking of goods continued in the Roman Empire where the mark represented fair dealing and integrity of the producer but had no legal status, implying that producer had no legal recourse against an infringement of the mark. Later on, under the *Lex Cornelia de iniuriis* 81 B.C., taking another's name for profit was prohibited, but there is no evidence that a link was made between such illegality and infringement of (trade) marks (Vukmir, 1992, p. 130). Novelty, compared to previous periods, was the raise in public awareness, the mere fact that “theft” of authorship was starting to be considered as something unacceptable. Regarding other aspects of the IPRs evolution in this period it can be concluded that “some prototypical forms of intellectual property existed, but there are no known reported or recorded cases under Roman law” (Vukmir, 1992, p. 130).

During the Middle Ages, (trade) marks continued to develop from Greek and Roman practices. Thirteenth century guilds' attitudes, regarding proprietary nature of their knowledge, were rapidly changing. Difference between the earlier usage of the marks and usage of the marks by the guilds, is that the guild members were **required** to use marks, so that individuals responsible for eventual defective goods could be punished for harming the

collective reputation of the guild. Trademark protection established by guilds, was perhaps the first form of intellectual property with elements resembling current law constructions.

Despite significant improvement and development of the ideas about knowledge ownership in previous periods, first formalized patent system was established in the fifteenth century Venice. As May and Sell (2006, p. 59) noted, for the first time in the history, a legal institutional form of intellectual property rights established the ownership of knowledge and was undoubtedly used as a mean to promote innovation. In one of his studies Mandich (1948, p. 206) stated that “Venice was the first to have continuously and constantly applied certain rules to patents of invention, instead of granting an occasional isolated monopoly”. Although intellectual property wasn't fully developed and formed in this period, none of the subsequent periods had the same impact on the IPRs evolution as did the Venetian statute's breaking off from previous practice.

Elsewhere on the European continent, national legislations started to develop under the influence of the Venetian law. The mere idea that individuals can produce knowledge and profit from it became prevalent at the time. Even though patents and copyrights were generally accepted, not all forms of intellectual property rights were received equally, without criticism, which had its impact on national legislation. Because of this, national legislation throughout the continent followed specific and various paths and was predominantly dependent on the country specific socio – legal factors as well as the level and trajectory of economic development (May & Sell, 2006, p. 97).

By the nineteenth century intellectual property as the institution was established in most of the countries, which resulted in a wide range of national laws and rules governing intellectual property. Compared to contemporary standards these laws provided weak and incomplete intellectual property protection. For instance, British patent system granted monopolies not to inventors but to those who made the invention known to general public, Swiss had no extensive and meaningful patent law between 1850 and 1907 which enabled widespread imitation, while the US patent system favored domestic innovators by denying protection to foreigners.

In 1873, a World Exposition was held in Vienna. US inventors refused to take part claiming fears that their inventions would not be properly protected. This led the host (Austro – Hungarian Empire) to provide temporary law (lasting for the duration of the event) that will protect foreign inventors and thus encourage their participation in the event. Following this compromise and as a result of German and Austrian intense lobbying efforts, the government held the 1873 Vienna Congress to address inventors' concerns (Dutfield, 2003b, p. 55). The overriding objective was to establish a system in which states would recognize and protect the rights of foreign investors and artists within states' own jurisdictions (Okediji, 1995, p. 137).

Following two subsequent conferences in Paris, in 1878 and 1880, Paris Convention for the Protection of Industrial Property, covering patents, trademarks and industrial designs was finally approved and signed in 1883, and completed by an Interpretative Protocol in Madrid in 1891 (World Intellectual Property Organization (WIPO), 1988, pp. 49–50), which finally laid the patent controversy to rest.

This and subsequent conventions set out to follow the example of the Paris Convention and to produce a multilateral copyright agreement (Ricketson, 1987, 49ff), which finally resulted in the Bern Convention for the Protection of Literary and Artistic Works. The United States was excluded from Bern Convention because of the existence of the so called manufacturing clause in their legislation, which went directly against principle of Bern Convention that made copyright protection of authorized publication automatic in any member state. The United States remained outside the agreement until 1986, when the clause was allowed to expire (May & Sell, 2006, p. 121).

Both agreements had the same basic principles: nondiscrimination, national treatment, and the right of priority (putting the right of the inventor in front of the right of the filer and reproducer). They also obligated member states to extend their legislation in a way that it also covers foreigners. These conventions neither created new substantive law nor imposed new laws on member states; rather, they reflected a consensus among member states that was legitimated by domestic laws already in place (Okediji, 1995, p. 137).

The twentieth century was the time of an expansion of IPRs, more precisely of an intellectual property laws in order to address developments occurred in earlier periods, with the United States being at the spotlight of IPRs related changes. Problems with the laxity of the rules governing patents led to a situation in which patents were used as a mean of controlling the markets (for purely commercial reasons).

One of the most famous examples was the “antibiotics cartel”, organized by Pfizer, Cyanamid, Bristol, Upjohn and Squibb, which lasted 10 years. All of these companies developed a form of tetracycline but only Pfizer and Bristol were awarded patents. Knowing that the patents would be attractive targets for litigation, the five companies agreed to recognize Pfizer's patent and to limit competition (Dutfield, 2003b, p. 119). As Braithwaite (1984, p. 184) stated, the patent “provided a cover for conspiratorial behavior to partition a market which in the absence of the patent would have been clearly illegal”. These companies kept the price of tetracycline constant and were able to organize a cartel – like structure, with the price for tetracycline the same across thirteen countries (Braithwaite & Drahos, 2002, p. 464). Instead of being supporters of market success, patents were now being perceived as an expression of their failure.

Fore mentioned events created a substantial anti – patent environment. More often than not, the courts presumed patents to be invalid, and patentees were criticized for setting monopoly prices for inventions that were already in the public domain (Dreyfuss, 1989,

p. 6). Patent related practices that had earlier helped to control market and increase market power, were now held back by the lack of government support.

However, it took another 20 years until certain industries in the United States started lobbying for stronger IPRs laws. With the development of an entertainment industry (film, music, software), companies joined by copyright interests pushed intellectual property protection to the top of the country's political agenda. Consequently, the 1980s therefore introduced a concept of intellectual property protection as a system to protect and exclude, rather than one based on competition and diffusion (May & Sell, 2006, p. 143).

At the early beginning of the twentieth century, the patent profession broke through a huge conceptual barrier by arguing that substances that occurred in nature, but had been isolated and purified, were actually patentable (Braithwaite & Drahos, 2002, p. 463). This has led to a widespread debate about what can be considered as patentable subject matter in life sciences. The problem culminated in a case in which doctors in California were awarded patent rights for their patient's cell, after the patient unsuccessfully sued the doctors for rights in his own spleen (Boyle, 1992).

Over time, the scope of the things that could be protected by copyright has also expanded, which has been particularly evident in the area of information technology and computing. As Cornish (1993, p. 55) noted, “the major computer lobbyists in the United States pressed for computer programs to be protected by accretion, that is, by treating them as literary work within traditional norms of copyright; and they now have persuaded much of the world to adopt this approach”.

In the twentieth century IPRs continued to develop due to multiple factors such as changing perceptions about intellectual property, technological advancements and institutionalization of legal settlements. Integrating all these events into rules governing intellectual property was, is and is going to be challenging for the time to come due to various reasons. As Edelman (2004, pp. 186–187) described: “Institutionalized ideas about what is rational develop at the societal level in concert with institutionalized ideas about what is fair, what is legal, what is legitimate, and even what is scientifically or technically possible” bearing in mind that “these institutionalized ideas vary, of course, across social and geographical realms over time”.

1.1.2 Intellectual Property Rights in the Twenty – First Century

IPRs protection is one of the most important public policy factors on which the knowledge – based industries of the twenty – first century rest. On going technological and social changes only support its growing importance. In order to properly address these changes the Agreement on Trade Related Aspects of Intellectual Property Rights (hereinafter: the TRIPs) was negotiated and ratified as the part of the WTO's establishment. The TRIPs presents WTO members with a single framework related to diverse aspects of intellectual

property that can not be incorporated directly into national law but rather sets out minimum standards to be achieved by all WTO members (May & Sell, 2006, p. 162).

The TRIPs is closely related to basic principles of the other WTO agreements, such as nondiscrimination clauses like national treatment and most favored nation treatment, intended at promoting technological innovation and technology transfer and diffusion. It covers all types of IPRs, with the sole exception of breeders' rights. The TRIPs itself is divided into seven sections that will be briefly presented in continuation.

First part of the agreement sets out basic principles and general provisions of the agreement and establishes relationship with previous treaties and conventions in their respective fields (Paris Convention for the Protection of Industrial Property, Berne Convention for the Protection of Literary and Artistic Works, Rome Convention of 1961, and Washington Treaty on Intellectual Property in Respect of Integrated Circuits). Article 7 of the agreement also reflects the interests and concerns of the developing countries' negotiators (Watal, 2003, p. 387), implying that IPRs protection and enforcement “should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in the manner conducive to social and economic welfare, and to a balance of rights and obligations” (General Agreement on Tariffs and Trade (GATT), 1994).

Second part of the agreement sets out obligations regarding different forms of IPRs covered by the agreement. Articles 9 through 14 cover copyright protection. Two subject matters have rose as controversial regarding copyrights protection. First is the question of the authors' moral rights. As May and Sell (2006, p. 165) described, the United States' dominant position at the negotiations was obvious, due to the fact that even though all members were required to comply with Articles 1–21 and the appendix of the Bern convention, the agreement explicitly excludes members from the obligations under Bern's article *6bis* related to authors' moral rights, focusing on economic rights (which remain fully alienable) rather than on nontransferable moral rights. Second area which has proved controversial is article 10 which states that “computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention” (GATT, 1994), which allows computer programs to be protected for the longest period of protection allowed under the agreement, raising concerns regarding technology transfer as it clearly favors owners over possible users.

Articles 15 through 21 are concerned with trademarks. This part particularly addresses the question regarding the protection against similar or confusing marks including the possibility of the protection of yet unregistered foreign marks. Although the WIPO has drafted nonbinding advice on how a mark might be recognized as well – known, many developing and developed countries seem unlikely and unwilling to extend protection to (nationally) unregistered marks (Watal, 2003, p. 261). On the other hand, although the

protection of trademarks was a major concern for the developed and industrialized countries, for the developing countries the question of trademarks was more an area for “horse – trading” than for serious antagonism between negotiating groups (Maskus, 2000a, p. 63).

A number of EU member states as well as Switzerland played a key role in establishing an agreement on geographical indicators as part of the TRIPs (Maskus, 2000a, p. 20). During the negotiations, French representatives were most persistent in their endeavor to protect appellations of origin (especially for the winemaking regions), which resulted in separate article dealing particularly with these products. The general idea behind the articles covering geographical indicators is “to constrain uses of geographical indicators that would produce unfair competition or would mislead the public as regards the origin of the goods concerned, although there is significant list of “fair use” and “good faith” exceptions to these provisions” (May & Sell, 2006, p. 168). Because this extended protection (available for wine and spirits) is not extended to non – European products such as Basmati rice or Darjeeling tee (Maskus, 2000a, p. 239), developing countries are put into position where they have to provide and uphold standards of protection higher than those in developed countries.

The area that proved to be the most controversial was the protection of patent rights. Certain provisions generated debates concerning several subject matters. First, the agreement didn't hinder further expansion of patentable subject matters. Although the agreement allows members to exclude from patent provision number of goods and materials used for their production¹, it doesn't **require** them to be outside patent system of the member state. Additionally, member states are required to “providing for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof” (GATT, 1994). Although these provisions allow members to treat fore mentioned subjects differently, they have to be integrated into country's IPRs system and in accordance with the requirements of the International Convention for the Protection of New Varieties of Plants.

The next problem was one concerning compulsory licensing, a situation in which a government allows someone else to produce the patented product or process without the consent of the patent owner. During the years developing countries have often stressed that refusal to grant patents for certain innovations, has had negative effects on technology transfer. Some studies have found that patents can facilitate technology transfer to more affluent developing countries (Smith, 2001; Maskus & Penubarti, 1995), although there appears to be clear threshold effects in market – based technology licensing (Maskus & Reichman, 2004, p. 289). All this has led to a situation where “rather than facilitating the

¹ Goods and materials in question include diagnostic, therapeutic, and surgical methods as well as plants and animals and the “essentially” biological processes for their production (WTO, 2001).

importation of new technologies for production (or service fulfillment), patents have historically been used to maintain import monopolies” (Kongolo, 2000, p. 275).

To respond to these problems governments of developing countries have sometimes used compulsory licensing, which has not proven to be as efficient as previously thought. Although developed countries didn't succeed in completely banishing compulsory licensing from the TRIPs they managed to limit it substantially using several sub – clauses. Today, under the TRIPs, compulsory licensing can't cover whole field of technology, must be limited to the purpose it was authorized, must be nonexclusive, must be non assignable, must predominantly be used to supply a domestic market, must include adequate remuneration to the rights holder and must be subject to judicial review (WTO, 2001).

Perhaps emblematic of the whole agreement, in the area of process patents, the burden of proof has been switched from the plaintiff (the owner of the patent) to the defendant (Dhar & Rao, 1996, pp. 315–317). Although certain provisions of the agreement enable interests of the defendant, in protecting his manufacturing and business secrets, to be taken into account, obligation to prove the case has shifted quite significantly to the owner of the original process patent (Verma, 1996, pp. 345–346).

The United States, backed by other developed countries, succeeded in their effort to include trade secrets in the TRIPs negotiations and subsequently in the TRIPs itself. The most important aspect of this measure is the use, and abuse, of commercially sensitive pharmaceutical test data (Maskus, 2000a, pp. 22–23). Even though certain limits are placed on the unfair commercialization of data and other undisclosed information, the inability of developed nations to reach a consensus has led to a situation in which these provisions have remained voluntary (May & Sell, 2006, p. 172).

After having determined standards and scope of the protection for different types of IPRs, final sections of the TRIPs deal with enforcement of these rights, or the enforceable protection of these rights through WTO membership. Articles set out rights and obligations right holders may expect in the case of the infringement, emphasizing serious offenses should be dealt with under criminal law. Important novelty compared to previous agreements is that the TRIPs adopts precedents developed in British law to grant applicants access to the premises of a defendant to seize and discover materials that might potentially represent an IPR infringement (Blakeney, 1996, p. 126).

The TRIPs represents a major milestone in the history of IPRs. Although it revealed problems and disputes between different stake holders, it globalizes question of IPRs, encouraging response especially from the developing countries which remained largely skeptical about role of the IPRs in general. Whatever deficiencies the TRIPs may have, the mere fact that it deals with multiple IPRs related subjects at a global level makes it one on the most important events in the modern history of IPRs.

1.2 Importance of Intellectual Property Rights

No other subject has attracted so many concerns, debates and criticism in the last two decades as IPRs. This can considerably be attributed to its ever growing importance as well as the fact that more often than not, IPRs is considered double – edged sword due to its unpredictable effects. In other words, its general effects can be either positive or negative. According to Maskus (2000b, pp. 143–144), importance of IPRs lays in the fact that they can either be of material assistance in a country's attempts to encourage its own technological, industrial, and cultural development or, if not protected properly be damaging for domestic inventive effort. There for, IPRs can either stimulate economic growth or hamper it.

There are multiple, interdependent mechanisms through which IPRs can positively or negatively affect economic growth. Some of them will be presented in continuation bearing in mind that these effects depend on many different factors such as development level of the country, level of IPRs protection, enforcement mechanisms, income levels, technological capabilities, etc. As Maskus, Dougherty and Mertha (2005) noted, the evidence is sometimes difficult to interpret because many of the concepts involved are dependent on country specific factors and in many cases not well measured, but there is a general accordance that, if properly structured, stronger IPRs can increase economic growth and improve development processes.

Recently, many studies have been done in order to evaluate the impact of IPRs on economic growth in both developed and developing countries (majority of the studies pooling together both developed and developing countries). Regardless of the results that different studies deliver, the ability to generalize such findings is limited as the developing and developed countries differ in their political, socio – cultural, scientific and technical capacities (CIPR, 2002). As Schneider (2005) emphasized pooling together developed and developing countries might lead to misleading conclusions and hence inadequate policy recommendations.

1.2.1 Intellectual Property Rights and Economic Growth: Positive Effects

There are numerous studies that suggest that strengthening IPRs could have a positive impact on economic growth (Kumar, 2002; WIPO, 2003). The three most important ways in which IPRs are thought to affect the growth will be presented here. First, intellectual property rights have been recognized as part of the infrastructure supporting investments in R&D leading to innovation and subsequent economic growth (Grossman & Helpman, 1991; Kanwar, 2006).

At the aggregate level Kanwar and Evenson (2003) examined directly whether stronger IPRs protection results in increased R&D expenditure. Estimating panel model for 32 countries, for the 1982–1995 period, they found that stronger IPRs protection has a

positive and significant impact on the share of R&D investment in GDP. These results provide important evidence on how indirectly through innovation, IPRs protection can stimulate growth, which is consistent with the results of Park (1999), who found that IPRs protection has an indirect positive impact on growth through physical capital investment and R&D in the most advanced countries.

Building up on earlier studies, Falvey and Foster (2006) examined the effect of IPRs protection on three groups of countries (low, middle and high – income countries) and found that IPRs protection has significant positive effects in low and high – income countries but not in middle – income countries. The mentioned authors demonstrated, among other things, that even though IPRs protection is dependent on the initial level of development, it promotes innovation in low and high – income countries but not in middle – income countries due to offsetting losses from imitation. La Croix and Konan (2006), however, indicate that middle – income countries should be the greatest beneficiaries from IPRs protection due to their ability to absorb technologies efficiently compared to low – income countries and lower investments costs in R& D compared to high – income countries.

There is a very little evidence concerning the effects IPRs protection has on innovation in developing countries, though Primo Braga, Fink and Sepulveda (2000) note that the criteria of novelty in patent grants is unlikely to be apt for promoting the small, incremental and adaptive innovations that are typical in developing countries. However, increasing number of studies question the positive effect of IPRs protection on economic performance in the context of developing countries and argue that IPRs do little to stimulate innovation in these countries because the R&D needed for innovation is absent (CIPR, 2002; Maskus, 2000b). Leger (2006) noted that the very low innovative capabilities of the less developed countries limit the potential of IPRs to support local innovation. Others also indicate that strengthening IPRs may result in job losses; drive up prices due to monopoly created by the intellectual property protection and reduce access to technology needed for development (Hillery, 2006; Kumar, 2002). Finally, Shapiro and Hassett (2005) stated that even if strong IPRs promote innovation, the benefits go primarily to those who develop them.

As we could see, the importance of innovation varies among countries and is usually dependent on country's level of development and resources it can invest in innovation. Thus, we may expect that IPRs protection will have different effects on innovation in countries with substantial innovative capacity compared to countries with limited or minimal capacities. All things considered, whatever the results found, they can not be generalized for different groups of countries or for the countries within the same group, due to country specific factors that can considerably influence such findings.

Second positive impact of IPRs protection on economic growth is one achieved through dissemination and acquisition of information. There are various studies that indicate that strengthening the IPRs system in developing countries directly encourages technology transfer from more advanced countries through foreign direct investment (FDI) and high technology imports, which could lead to total factor productivity improvements (Shapiro & Hassett, 2005; Taylor, 1993; Taylor, 1994). As Evenson and Westphal (1995) described, for countries whose firms are not at the technological frontier, the diffusion of technology from the frontier is likely to be an important source of productivity growth, through both imitation and also through follow - on innovation and adaptation.

“International technology transfer or diffusion refers to the process by which a firm in one country gains access to and employs technology developed in another country ... which occurs between willing partners in voluntary transactions or through non - market transactions or spillovers” (Falvey & Foster, 2006, p. 23). As in the case of innovation, the effect of IPRs protection on technology diffusion is ambiguous, and it largely depends on country specific factors, mainly country’ s imitative ability and level of development. On the one hand, stronger IPRs protection may hinder technology diffusion, when patent holder prevents others from using his knowledge and uses its market power to limit further dissemination of knowledge. On the other hand, IPRs can have a positive impact on technology diffusion through information stated in patent claims which is available to other inventors.

Since there is an abundance of channels through which transfer of technology may occur, it comes as no surprise that there is also a large variety of studies using different techniques and different sets of data to prove their hypotheses. Due to this fact, only general findings will be set out in continuation, namely country specific evidence, for three groups of countries which emerged from previous studies: advanced countries with substantial innovative capability, middle - income countries with imitative capability and potential to innovate and poor countries with neither.

In the case of the advanced countries, stronger IPRs protection increases growth which according to Falvey and Foster (2006) at least partly comes about through technology diffusion, as shown by increases in foreign patenting. Further more, knowledge formation is cumulative: as new inventions build on past practices, technical change accelerates

(Scotchmer, 1991). Maskus and McDaniel (1999) investigated how the postwar Japanese patent system affected technological progress in Japan. The study showed that Japanese patent system encouraged incremental and adaptive innovation and the diffusion of knowledge into the economy, mostly through the use of utility models (patents of a shorter duration), which enabled building upon more fundamental discoveries.

Evidence for middle - income countries suggests that a stronger IPRs protection has no overall impact on economic growth through technology diffusion. Even though several studies found that technology diffusion has positive impact on economic growth, in majority of the cases stronger IPRs protection offsets growth due to the fact that benefits obtained through imitation are precluded by the stronger IPRs regime. For example, Kumar (2002) investigated the role of IPRs protection in development of the countries such as Republic of Korea and Taiwan. He argues that the Republic of Korea deliberately softened IPRs protection to facilitate imitation by domestic enterprises. In Taiwan, Kumar (2002) found that IPRs protection was also weak to encourage the diffusion of knowledge, with the government openly encouraging counterfeiting as a mean of developing local industries.

Evidence for poor countries shows that stronger IPRs protection gives incentive for the growth, but it is not clear through which mechanism this can be achieved. Shapiro and Hassett (2005) stated that even if strong IPRs promote innovation, the benefits go primarily to those who develop them. Additionally, Horii and Iwaisako (2007) claim that strengthening IPRs lowers growth in technologically deficient economies especially when it lowers imitation, implying that a strong patent regime encourages profit transfers to firms outside the country rather than encouraging domestic innovative activity.

Third positive effect of IPRs protection on economic growth is market deepening and quality assurance. Innovation doesn't solely include development of new products and processes. It is equally about establishing marketing and distribution networks that support expansion and scale economies (Maskus et al., 2005). In the case of weaker IPRs protection regime this is difficult to achieve, as right holder can't prevent quality deterioration of products by their marketing outlets, nor they can do much to prevent counterfeiting of their trademarks. Thus strong IPRs system enables protection and enforcement of right holders' rights, throughout both supply and distribution chains, which in effect gives positive incentives to both innovators and distributors to invest in marketing activities, related services and quality assurance.

Quality assurance is essential for consumers. Sale of low quality, counterfeited products can only damage firm's reputation (most notably in the case of new firms) achieved at substantial cost; the problem that can only be solved by additional investments and costs. In principle, effective trademark enforcement both raises the average quality of products over time and provides a wider range of qualities from which consumers may choose (Maskus et al., 2005). Quality assurance is extremely important in the case of food, beverages, cosmetics and drugs, where counterfeited products can seriously damage health. Field research in China suggests that despite the advantages to poor consumers of having access to low – cost product knockoffs and unauthorized copies of entertainment products, they are becoming more resentful that market saturation by unauthorized goods diminishes the range of legitimate goods available (Maskus, Dougherty & Mertha, 1998).

1.2.2 Intellectual Property Rights and Economic Growth: Negative Effects

While developing countries may benefit long – run gains from the introduction and implementation of stronger IPRs regime, the process may also include substantial short – run costs as a result of that transition, as gains take time to appear. There are several problems related to introduction of stronger IPRs system that could have negative effects on economic growth. First problem comes with the elimination of infringing activities.

Maskus (2000c) explored the effects of introducing stronger IPR protection in the Lebanon, using survey data on 117 manufacturing and services firms. By using partial equilibrium models he calculated the impact of stronger IPRs protection in different industries, such as software, printing and publishing, music and film industry, food products, cosmetics and pharmaceuticals, all of which are industries with high copying rates. These high copying rates suggest that there are significant amounts of labor employed in copying and retailing illegitimate products (Maskus, 1997). For majority of the industries he found that the static effects of stronger IPRs protection on prices, employment and output are likely to be negative. For example, he found that employment in IPRs sensitive Lebanese sectors should fall by some 5.459 workers which is about 0, 5 percent of the formal labor force in Lebanon. Even though the problem is small compared to overall labor market, the real problem stems from the fact that most of these workers are stationed in industries where piracy is common, which causes many problems related to providing alternative employment for them. As enforcement expands, this labor must find alternative employment, meaning that the initial short – run cost of stronger IPRs protection is labor displacement (Maskus et al., 2005).

Second factor that can hinder economic growth comes through higher imitation costs. Due to the fact that stronger IPRs increase costs of imitation and copying of the technologies used in production of different products, transfer of the knowledge gained through simple

imitation becomes more difficult and expensive. Because in many countries this is the primary source of technology and knowledge diffusion, the final result could be lower economic growth. Survey evidence from China reveals that managers of foreign enterprises are reluctant to locate R&D facilities in China for fear of misappropriation and patent infringement (Maskus et al., 2005). These factors often lead firms not to transfer the latest technology in China, but rather relatively old technologies, technologies that were at least five years behind the technological frontier. The problem often requires painful and suboptimal decision to be made: either to introduce stronger IPRs protection and disable technology diffusion in certain measure or to introduce weaker IPRs rules which will subsequently increase probability of IPRs violations.

Mostly emphasized problem related to IPRs is that by allowing right holders to have temporary exclusive rights on inventions, they can price their products above marginal cost, raising prices even to monopolistic levels. The concern is strongest in developing countries because, as Horii and Iwaisako explained (2007), strong patent regime only acts to transfer profits to firms outside the country rather than encouraging domestic innovative activity. Furthermore, it is possible that some corporations will focus their resources on defending their original innovations rather than developing new products and therefore limiting their output below socially desirable levels leading to negative consequences on consumer welfare (Shapiro & Hassett, 2005). All these factors represent the loss in the countries that are mainly importers of technology, ultimately hindering growth.

Finally, economic growth can be affected through different IPRs abuses, conducted by the groups and individuals who want to gain from its exploitation. Some of these abuses include bad faith lawsuits, patent pooling agreements aimed at reducing competition, insistence on exclusive rights in the case of competing technologies and different competition manipulations in markets predominantly dependent on IPRs.

1.3 Economics of Intellectual Property Rights

In the past two decades, economic literature regarding IPRs has mainly been concerned with the effects that legal recognition of IPRs as monopoly rights may have. Needless to say, this subject generated many debates. While some researchers regard this with less importance, others treat it with much interest (Lessig, 2001). The main question of the debate wasn't whether the IPRs are monopoly rights, but rather in which situations IPRs are likely to lead to monopoly related problems.

Property rights are defined as the power to exclude others, implying that the owner of the property has the right to use it and benefit from it, as well as to exclude others from using it. This means that if someone wants access to the property held by others, then these rights must be

purchased in a voluntary transaction in which the value of the rights is agreed between the buyer and seller (Calabresi & Melamed, 1972).

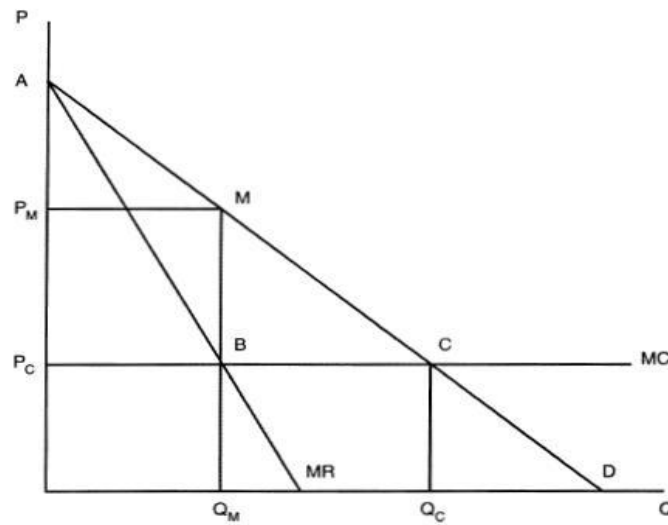
Bearing in mind importance of IPRs, it is generally accepted that they should provide balance between private rights of the owner and the public needs for the availability of important knowledge. According to Gans, Williams and Briggs (2004), there are two ways in which the property rights system is socially valuable: either by ensuring that trade takes place in a way that will maximize social value (providing allocative efficiency) or by encouraging that assets created are socially valuable (providing dynamic efficiency).

However, creating a well – functioning system of property rights for intellectual property may incur particular difficulties that are associated mostly with its establishment, enforcement and the exchange of rights (Gans et al., 2004). The main problem with the establishment of the IPRs is creating scarcity where it doesn't formally exist. In other words, knowledge is regarded as public good. Samuelson (1954) defined a public good as a good whose consumption is non – rivalrous. Applied to knowledge, this implies that sharing the knowledge with other people doesn't diminish or take away what you know. Putting it differently, there is no marginal cost associated with the use of knowledge, meaning that distributing knowledge freely to everybody is more efficient than restricting its use by charging for it (Stiglitz, 2008, p. 1700).

The problem is that imposition of scarcity in knowledge through legal construction of IPRs consequently affects static efficiency which requires that users have wide access at marginal social cost, which in the case of knowledge may be quite low. As stated by Stiglitz (2008), intellectual property not only creates a distortion by circumscribing the use of knowledge, but it also creates monopoly power which causes inequities and major distortions in the allocation of resources. He continues by arguing that the whole situation is somewhat confusing, because we not only tolerate fore mentioned distortions and inefficiencies by allowing the use of knowledge to be restricted (which creates monopoly power), but we sanction it hoping that it will promote innovation. On the other hand, free distribution could create problems regarding incentives to innovate, which would consequently affect dynamic efficiency. As Boldrin and Levine (2002) noted, market economies require rule of law and that no economic agent exercises productive effort, without the certainty of controlling its fruits, which will ensure that a resources are allocated to the most valuable uses.

The basic trade – off between static and dynamic efficiency in the case of IPRs can be illustrated by using Figure 1.

Figure 1: Basic Access/Innovation Trade – Off in IPRs



Source: K. E. Maskus, *Globalization and the economics of intellectual property rights: Dancing the dual distortion*, 2000, p. 30.

Once the product is invented it can be supplied to the market at marginal cost which is constant. After being made available, product is required to be sold at marginal cost at point C, creating consumer benefits equal to $AP_C C$ area. However, solution at point C is unattainable in a competitive surrounding, since all the firms can imitate product without any costs implied and sell its close substitutes. This solution wouldn't generate rents needed to cover innovators R&D cost thus acting as a disincentive to invest and making the entire consumer benefit area disappear.

Alternative solution is to create monopoly through an IPR. In this case, product would be offered at point M, earning monopoly rent, or the return on the original investment, equal to $P_M P_C B M$ area. Economy would suffer dead weight loss of $M B C$ area, compared to solution at point C which is competitive but unattainable. Compared to the previous case which deters innovation, this solution provides society with a net gain of the remaining consumer surplus plus monopoly profits. According to Maskus (2000d, p. 30), although IPRs can improve situation in a certain measure, they are incapable of operating so precisely in the practice and can only be regarded as second – best remedies for the mentioned market distortions.

As previously noted, in order for IPRs system to be socially valuable, it needs to provide balance between right holder's reward and social returns. The problem is that under certain IPRs systems (most notably patent system) the reward doesn't correspond to the marginal social return. According to Stiglitz (2008, p. 1076), the marginal social return is “having innovation available earlier than it otherwise would have been.” Instead of rewarding individuals or firms on the basis of the marginal social return of the contribution they made, the patent system simply awards them an entire value of the innovation, which can

clearly be much greater than the marginal social contribution and which will consequently cause distortions.

Besides hampering innovation by granting temporary exclusive rights to the right holders, there are other ways in which patents may impede innovation. According to Stiglitz (1997), if we look at the knowledge as the main input in the production of knowledge than it is clear that by restricting input we will also restrict output. In other words, if we restrict availability of the knowledge by raising its price, others will have less incentive to invent because the cost of knowledge will be greater. Furthermore, due to the fact that their position allows them to produce less, the benefit from reducing the cost of production by a given amount is less (Arrow, 1962). When we add the lack of competition, it is clear why incentives to invest further are diminishing. Final problem related to the subject is so called patent thicket. Patent thickets refer to multiple and overlapping patent rights that require those seeking to commercialize new technology to obtain licenses from multiple patent holders (Carrier, 2003, pp. 1090–1091). Broad coverage of the rights in certain cases not only increases transaction costs but also acts as a disincentive for further research and innovation.

After reviewing problems that can appear in the process of creating well functioning IPRs system, it should be noted that there are also problems associated with its enforcement and exchange. The main problem with the enforcement of these rights is that, unlike in the case of physical assets, it is very hard to track its unauthorized use since it doesn't directly affect owner's use of the asset. Additionally, because these types of rights are easily replicated and transferred, costs of enforcement tend to be very high.

According to Gans et al. (2004), there are three main problems that can occur in the exchange of intellectual property: the disclosure problem, the contingency problem and the perception problem. The **disclosure problem** means that it is very difficult to detract appropriate price for the knowledge. The **contingency problem** is concerned with the fact that the value of intellectual property is very difficult to determine since it depends on multiple factors such as market demand and the existence of other and similar technologies that can influence its real value. Finally, the **perception problem** stems from the fact that different individuals perceive the value of a certain property differently, making it extremely difficult to agree over price.

1.4 Measurement of Intellectual Property Rights Protection

An important realm in the empirical research of IPRs related topics is the measure of IPRs protection. The key variable in many studies dealing with the subject is a proxy for IPRs regime. However, it is hard to quantify the level of each country's intellectual property protection, due to the variability of country specific factors (Maskus, 2000a). Despite the

obvious practical importance of the subject, it was not until the 1990s that someone had made research in this specific area. The first attempt was made by Rapp and Rozek (1990).

The Rapp and Rozek index (hereinafter: RR index) compares the consistency of each country's patent laws with the minimum standards proposed by the US Chamber of Commerce, including guidelines for patent examination procedures, term of protection, compulsory licensing, coverage of inventions, transferability of patent rights and effective enforcement against infringement. The index covers 159 countries and is focused primarily on patent laws rather than other forms of IP protection. Country's level of patent protection is measured on a scale of zero to five, presented in Table 1.

Table 1: Rapp and Rozek Scale for Intellectual Property Rights/Patent Protection

Scale score	Description
0	No intellectual property protection laws
1	Inadequate protection laws; no law prohibiting piracy
2	Seriously flawed laws
3	Flaws in laws; some enforcement laws
4	Generally good laws
5	Protection and enforcement of laws fully consistent with minimum standards proposed by the U.S. Chamber of Commerce

Source: R. Rapp and R. P. Rozek, Benefits and Costs of Intellectual Property Protection in Developing Countries, 1990, Appendix 4.

The RR index was considerably extended by Ginarte and Park. Ginarte and Park (1997) constructed their index for 110 countries, for period 1960–1990, focusing mainly on the strength of patent rights, in order to identify effects that IPRs protection may have on economic growth. The Ginarte – Park index (hereinafter: GP index) covers five categories of patent laws:

1. Extent of coverage,
2. Membership in international patent agreements,
3. Provisions for loss of protection,
4. Enforcement mechanisms, and
5. Duration of protection.

Index ranges from zero to five, where zero represents a country with no patent protection and five a country with the highest level of protection.

Although they made a step forward in quantifying the IPRs protection, RR index and GP index suffer from multiple problems. The first problem is that they are both based on the laws themselves, but not on their enforcement or implementation. Consequently these indices will overestimate the level of protection in a country where strong anti – infringement laws exist, but are not enforced as may be the case in many developing

countries that inherited IPRs laws from their colonial powers, but do not have the administrative capacity or inclination to enforce them (Gould & Gruben, 1996). The second problem is that it is very hard to identify why there are differences in the strength of IPRs protection among different countries, or in other words it is hard to identify the source of variation and to investigate the impact it may have on the protection. Furthermore, the both indices are based primary on the perceived strength of the country's patent law, neglecting other forms of IPRs protection and they both belong to the pre – transition period when there wasn't such strong international IPRs protection obligations as the ones we have today under the TRIPs.

Building up on previous findings various authors tried to provide indices of IPRs protection that would address problems emerged in earlier studies. For instance, Seyoum (1996) offered an index covering 27 countries, based on the United States data. He constructed a scale of zero to three for the protection of patents, copyrights, trademarks and trade secrets, where the strength of each of these laws is measured individually. The scale is constructed from surveys sent to IPRs practitioners, which were than validated against each other and the existing literature. The main flaws of the index are that it doesn't take into account the enforcement component and is weak on illustrating comparative country data.

Sherwood (1997) proposed a third measure of IPRs protection that combined personal knowledge and experience with professional interviews. The protection scores are developed for 18 countries, theoretically ranging from 0 to 103. Eight major components included in Sherwood's measure are presented in Table 2.

Table 2: Sherwood's Eight Intellectual Property Rights Components

Description	Assigned points
Enforceability	25
Administration	10
Substantive law	
• Copyright	12
• Patents	17
• Trademarks	9
• Trade secrets	25
• Life forms	6
Treaties	6
Total	100
Public commitment	3
Total possible points added	3

Source: R. M. Sherwood, Intellectual Property Systems and Investment Stimulation: The Rating of Systems in Eighteen Developing Countries, 1997, p. 265.

The conditions for rating countries were derived from the US Chamber of Commerce Guidelines, but the relative weights and the points assigned to every category were derived mostly from the author's experience and conducted interviews (Sherwood, 1997, pp.

265–267). Each of the components presented in the table contains subcategories which can gain and lose points in the amount determined by the author, again on the basis of the interviews and the author’s experience.

However, as in previous cases, there are several problems related to the measure. First, Sherwood (1997) provides a subjective index, based on personal experience of the researcher which cannot be objectively verified. Second, while Seyoum (1997) measures strength of the each law included in the measure individually, Sherwood’s measure simply puts together five different types of IPR law into the measure. Finally, even though he made a step forward by including enforceability component into the measure, according to Ostergard (2000, p. 353) this component merely reflects an assessment of the potential to enforce IPRs laws and not the assessment of the regime's actual performance.

In order to address fore mentioned problems, Ostergard (2000) provided a comprehensive index of IPRs measurement, including both law and enforcement measurements. Index covers 76 countries and includes only patents, copyrights and trademarks because, as the author stated, the majority of intellectual property is protected under these laws and because the information on these laws is more accessible than for other types of IP laws. However, the measure is constructed by using data obtained mainly from US sources and is weak on enforcement data, which remains the biggest problem for the future research.

Despite the fact that certain progress concerning the subject has been made, there is still much to be done. Two shortcomings of the previous studies are especially worrisome. First, it is very hard to determine what is the source of variation in the strength of IPRs protection among the countries and how can these variations be included into one measure. Second, the importance of the enforcement component in the IPRs protection is obvious, but the problem of its inclusion in the protection measures still remains, because of the mentioned differences in countries' enforcement practices of the laws. Developing a systematic approach that will deal with the stated problems is essential, if the comprehensive and comparative measure is to be created.

2 INTELLECTUAL PROPERTY RIGHTS PROTECTION IN BOSNIA AND HERZEGOVINA

2.1 Forms of Intellectual Property in Bosnia and Herzegovina

Intellectual property in BiH comprises copyrights and related rights, and industrial property rights.

Table 3: Forms of Intellectual Property in BiH

Intellectual property	
Industrial property	Copyright and related rights

<ul style="list-style-type: none"> • Patents • Trademarks • Industrial designs • Geographical indications and appellations of origin • Topographies of semiconductor products 	<p>Copyright:</p> <ul style="list-style-type: none"> • Literary works (written works, oral works, computer programs) • Musical works • Dramatic, dramatic – musical and puppetry works • Choreographic works and works of pantomime • Works of visual art • Works of applied art • Photographic works • Cinematographic works • Translations, adaptations, arrangements and other alterations of work • Collections of copyright work, data or other materials
	<p>Related rights:</p> <ul style="list-style-type: none"> • Performances • Phonograms • Broadcasts

2.1.1 Industrial Property Rights

Industrial property usually includes the rights by which manufacturers try to protect their businesses and commercial interests, their market position and their resources invested in research, development and promotion. Depending on the field of the concerned activity, the results of intellectual creativity can be protected by the corresponding forms of intellectual property: patents, trademarks, industrial designs, geographical indications and topographies of semiconductor products.

Procedures for acquisition, maintenance, sale and lapse of an industrial property right are carried out by the Institute for Intellectual Property of BiH (hereinafter: the Institute). In respect of protection of industrial property rights, foreign natural persons and legal entities enjoy the same rights as domestic natural persons and legal entities, if that is regulated by the international treaties or conventions signed or ratified by the BiH or in the cases where reciprocity principle is applied. First instance decisions made by the Institute upon a case can be appealed against, to the Board of Appeal within the Institute. An appeal against the second instance decision of the Institute is not allowed, but the administrative action may be brought before the Court of BiH.

The patent granting procedure in BiH is carried out by the Institute in compliance with the Patent Law and the Patent Regulations. As of October 2010, patent granting procedure for the patents having effect in the territory of BiH may also be carried out through the

European Patent Office, by filling application directly to the mentioned Office. The patent granting procedure consists of formal examination and substantive examination.

During the formal examination the Institute verifies whether the application meets all the elements stipulated by the law and regulations. After the formal examination, the application becomes available to the public through its publishing in the Institute's official gazette. If the application doesn't meet all the requirements, deficiencies must be remedied in the period not exceeding 90 days. The procedure may result in the grant of patent for proposed invention or its refusal. According to the current legislation, the Institute grants patents without prior substantive examination of applications, shifting the burden of proof of the validity of such patent to patent holder (Commission of the European Communities, 2009). The protection for a patent granted on the basis of substantive examination shall last for 20 years as from the date of filling the application, and 10 years for a consensual patent, as from the date of filling the application.

The protection requirements and the trademark granting procedure are carried out in compliance with the Trademark Law and the Trademark Regulations. Although the trademark registration is not obligatory at the time of making products and/or services available to the public, it is very useful to protect different aspects of the products by certain form of intellectual property. Before filling the application, the applicant must indicate the goods and/or services to which the sign relates and for which the protection is requested, in accordance with the Nice classification. When drawing the list, one needs to be very careful, since the list determines scope of the protection of the trademark concerned. In order to avoid unnecessary problems, the good thing to do before filling the application is to conduct the similarity search of the trademarks in force. If granted, trademark shall be valid for 10 years, as from the date of filling the application, with the possibility of ten year renewal terms.

Industrial design granting procedure is carried out in compliance with the Law on Industrial Designs and the Regulations on Industrial Designs. Since one of the main requirements for the protection of an industrial design is novelty, the registration procedure must be initiated before the subject matter of protection is made available to the public. Corresponding application may be a single one (for one design) or a multiple one (for several different designs). In the case of several different designs, the Law on Industrial Designs (*Official Gazette of BiH*, no. 53/10) stipulates that all designs contained in application must relate to the products classified under a single class of the International Classification for Industrial Designs. Besides the basic requirements application also has to contain photography or a graphic representation of a design to be protected. If the application is granted, industrial design shall be valid for 5 years as from the day of filling the application, with a possibility of extension for the same period four times.

The registration of geographical indications and appellations of origin is conducted before the Institute, in compliance with the Law on the Protection of Indications of Geographical Origin and corresponding Regulations. The application may be filed by the associations of legal persons and natural entities, chambers of commerce, municipalities and government agencies, implying that geographical indication is collective right and as such can not be the subject of transfer of rights (license, franchise and the like). Once granted, protection of geographical indication has no temporal limitations, unless it is removed from the register by relevant authorities.

Protection and granting procedure in the case of topography of semiconductor products in BiH is conducted in compliance with the Law on the Protection of Topographies of Integrated Circuits and corresponding Regulations. The two basic protection requirements in the case of topography are that it has to be original, the result of creator's individual effort, and that it is not commonplace in the semiconductor industry. The protection of these products is highly important because of the fact that development of the product requires substantial investments, while the copying of already developed products is very simple and cheap. According to the Law on the Protection of Integrated Circuit Topographies (*Official Gazette of BiH*, no. 53/10), the protection does not apply to any concept, process, system, technique of production of the topography or any information embodied in the topography, but to the topography as such. If granted, protection in the case of topographies shall last ten years as from the day of filling the application, or from the day of the first commercial exploitation of topography anywhere in the world, whichever is earlier.

Number of industrial property rights applications in BiH is presented in Table 4. As we can see, number of applications has been decreasing over time, mainly because of the BiH's grim economic and political prospects (including political instability, complex legal and regulatory framework, nontransparent business procedures, weak judicial structures, etc.). Although a set of national laws regarding industrial property rights has been adopted, no significant development concerning this specific area has taken place.

Table 4: Number of Patent/Trademark/Industrial Design Applications in BiH 1993–2010

Number of patent applications	1993–2005	2006	2007	2008	2009	2010
Applications filed with the Institute	801	49	66	61	58	58
Applications filed by PCT route	1603	168	26	10	17	5
Total	2404	217	92	71	75	63
Applications filed by resident applicants	435	55	61	60	54	54
Applications filed by non – resident applicants by national route	1969	162	31	11	21	9
Total	2404	217	92	71	75	63
Number of trademark applications						
Applications filed by resident applicants	1643	319	334	421	363	290

Applications filed by non – resident applicants by national route	11282	872	1041	1068	488	552
Total	12926	1190	1375	1489	851	842
Number of industrial design applications						
Applications filed by resident applicants	117	10	26	13	9	16
Applications filed by non – resident applicants by national route	201	25	46	50	13	9
Total	318	35	72	63	22	25

Source: Institute for Intellectual Property of BiH Annual Report 2010, pp. 15–32.

Present system of granting patent applications lacks much needed effectiveness and reveals chronic problems resulting mainly from the Institute's poor administrative and operational capacities. According to the Commission of the European Communities (2009), only during 2009 the Institute had 1.660 patent applications being processed or waiting to be processed, resulting in an almost five years needed to conclude the procedure, a period which can be considered as excessive, if we take into account the fact that patents are granted without prior substantive examination. Notable improvement has been made in 2010, with the average time needed to process a patent application reduced from five to two years (Commission of the European Communities, 2010).

Trademarks and industrial designs on the other hand are granted on the basis of prior substantive examination of applications. The growth in trademark applications and the limited capacity of the Institute have resulted in an extremely long waiting time, four years on average, with the process being reduced to two and a half years in 2010 (Commission of the European Communities, 2010). In contrast, waiting time for design applications is relatively short, one year on average, most probably because of the small number of applications as well as the limited documentary base in the examination process.

As regards geographical indications, until now only two applications have been filed with the Institute, one by resident and one by non - resident applicant, while in the case of topographies of integrated circuits, no applications for the protection have yet been filed with the Institute.

2.1.2 Copyright and Related Rights

The authors of the works in the literary, scientific, artistic and other realms of intellectual creativity have the exclusive rights to use or authorize others to use their work. Such rights as well as the legal instruments protecting them are called copyrights. Copyrights and related rights in BiH are protected under the Copyright and Related Rights Law and corresponding Regulations. According to the Copyright and Related Rights Law (*Official Gazette of BiH*, no. 63/10), copyright is conferred to the author by the mere act of creation, and as such is not subject to any administrative or registration procedure.

Copyright has two important characteristics. First, as the compound of moral and economic rights is not transferable. Moral rights are not transferable. Even though, after the death of the author, his successors may enjoy certain entitlements within the category, they are not the author's universal successors in that sense. On the other hand, economic rights are transferable, both during the life of the author and after his death by the means of succession. Second, copyright is indivisible, meaning that if a right is created by multiple authors, they all have an indivisible copyright in it, determined in proportion to the real contribution made by each co – author in the process of creation.

Copyright in BiH may be also exercised through the collective management of rights. This is usually done in cases where it is not possible or rational to regulate all of the copyright relationships and the collection of royalties on an individual basis due to a large number of users and the frequency of use. According to the Institute's website, the essence of the collective management of rights is that several authors entrust a specialized author's association by contract with granting to the users the right to use all of their works of certain kind on its behalf, but for their account, collecting royalties for use from the users and distributing such royalties to the authors (Intellectual property, 2011).

Under the Law on the Collective Management of Copyright and Related Rights (*Official Gazette of BiH*, no. 63/10) the Institute is authorized to issue licenses for work to the organizations for the collective management of copyright and to supervise their work. Currently, there are four such organizations in BiH: Sine Qua Non (for the protection and representation of copyrights and rights of the performers), Uzus (for the protection and representation of the performers' rights), Kvantum (for the protection and representation of phonogram producers' rights) and Elta – Kabel (for the protection and representation of radio broadcasting organizations' rights). However, due to very imprecisely defined jurisdictions of the Institute in the process of the establishment and administrative supervision of these organizations, as well as the obligations these organizations have toward the authors and holders of related rights, misunderstandings and conflicts between different parties are quite frequent (Institute for Intellectual Property of BiH, 2008).

Copyright runs for the life of its author and 70 years after his death. In the case of a co – authorship, the term of protection is calculated from the death of the last surviving co – author. Copyright of the anonymous works has the protection term of 70 years as from the

day of the lawful disclosure of such work. Term of protection of the copyright on collective works shall run for 70 years from the day of the lawful disclosure of such work.

Related rights are the rights covering the protection of artistic expressions and related organizational, business and financial investments in the performance, production, distribution and broadcasting of copyright works. Related rights in BiH include: rights of performers, rights of the producers of phonograms and rights of broadcasting organizations. Related rights exist the moment a subject matter of protection is created, and are not subject to any administrative formalities. Term of protection of the mentioned rights is 50 years, where the day of the beginning of protection depends on the type of the corresponding right. Related rights contain economic entitlements that can be transferred and succeeded to.

2.2 Intellectual Property System of Bosnia and Herzegovina

With the disintegration of Yugoslavia, the country's intellectual property system also broke down, as it was established on the Federal level in Belgrade as the Federal Institute for Patents. With the proclamation of the independence of BiH and its recognition by the United Nations, the basic conditions for the establishment of an intellectual property system on national level and the establishment of a relevant institution which would act as a central point of the system were created.

The intellectual property system of BIH was set up in 1992 with the acceptance of the legislation governing industrial property protection, copyright and related rights and implementation procedure of the former Yugoslavia, as well as the conventions and treaties which had also been ratified by the former Yugoslavia (Vignjević, 2010a). By the next year, BiH had adopted all duties as a WIPO member, while the WIPO made the decision to continue cooperation regarding intellectual property rights related subjects on the basis of the Vienna Convention, which came into force in March, 1992.

Nevertheless, the Constitution of BiH does not contain any provisions that specifically recognize and guarantee the protection of intellectual property rights, although Article II, paragraph 3, protects the freedom of expression and the right to property (WIPO Lex, 2011). Present system of intellectual property in BiH, presented in Figure 2, comprises three basic components: legislation, institutions and users, whose successful functioning is the main precondition for the protection and enforcement of different forms of IPRs.

Figure 2: Intellectual Property System of BiH



<ol style="list-style-type: none"> 1. Institutions for the establishment of IPRs 2. Institutions for the enforcement of IPRs 	<p style="text-align: center;">Intellectual property laws and regulations</p>	<p style="text-align: center;">Applicants</p>
<ul style="list-style-type: none"> • Institute for Intellectual Property of BiH • National IP relevant authorities 	<ul style="list-style-type: none"> • National laws and regulations • International conventions • International agreements and contracts 	<ul style="list-style-type: none"> • Economic system • SME • R&D institutions • Higher education institutions • Artisans • Innovators

2.2.1 Intellectual Property Rights Related Institutions

Institutions responsible for the successful functioning of the IPRs system in BiH can be divided into two following groups:

1. Institutions for the establishment of IPRs, and
2. Institutions for the enforcement of IPRs.

Institution responsible for the establishment of IPRs in BiH is the Institute. The Institute is a legal successor of the Institute for Standardization, Metrology and Patents of BiH, established on October 1, 1992 (Vignjević, 2010a). The Law Establishing the Institute entered into force on September 30, 2004. Since 2009 the Institute acts as an independent, administrative organization on a national level, and is the **only** state authority with the jurisdiction to grant IPRs. It is funded from the budget of BiH and it reports directly to the Council of Ministers of BiH.

According to the Law Establishing the Institute for Intellectual Property of BiH (*Official Gazette of BiH*, no. 43/04), the Institute is responsible for:

- **Protection of industrial property rights** and procedures relating to acquisition, maintenance, sale and lapse of industrial property rights,
- **Tasks in the domain of copyright and related rights**, such as issuing licenses for the collective management of copyright and related rights and supervision of the work of organizations for the collective management of copyright and related rights,
- **International cooperation** with the institutions and organizations of other countries at international, regional and other levels,
- **Legislative activities** covering all necessary preparations for signing bilateral and multilateral agreements, conventions, laws and other regulations in the area of intellectual property, and
- **All professional activities in this field** not explicitly allocated to other state bodies, in particular documentation, information services, education and publishing in the domain of intellectual property.

During the last couple of years the Institute has been facing multiple, chronic problems in its functioning. Although slight improvement has been made, there are still various problems to be solved. The biggest problem is the fact that the Institute's administrative and operational capacity is insufficient relative to tasks conducted before it, which only generates more problems.

Institutions responsible for the enforcement of IPRs in BiH are:

- **Indirect Taxation Authority** (Customs Authority) – the biggest state level institution responsible for ensuring the quality and authenticity of goods, fighting against trafficking in prohibited goods and substances, as well as for the prevention of illegal movement of goods and people,
- **Courts** (Municipal and Cantonal) – responsible for carrying out administrative and judicial functions in IPRs related cases,
- **Court of BiH** – judicial authority responsible to prosecute and judge in criminal offences against IPRs and to judicially review the administrative decisions of the Institute,
- **Market Inspection Agencies** (Market Inspection of Federation of BiH (FBiH)/ Republic of Srpska (RS) – responsible for conducting administrative measures, penal (initiative) measures and criminal reports in IPRs infringement cases,
- **Police,**
- **Border police,** and
- **Ministry of Agriculture, Water Management and Forestry of FBiH/RS.**

2.2.2 Intellectual Property Rights Related Legislation

As previously mentioned intellectual property system of BiH has been set up in 1992 with the acceptance of legislation governing intellectual property protection and IPRs related conventions and treaties ratified by the former Yugoslavia. In this period BiH accepted eight conventions previously ratified by the former Yugoslavia (Refer to Appendix 2, BiH Membership in International Treaties and Conventions). Copyright and related rights legislation also taken over from the former Yugoslavia, has been applied until 2002, when the first regulatory reform was implemented.

During 2002 the Parliament adopted Industrial Property Law of BiH, Law on Copyright and Related Rights of BiH and corresponding Regulations. Adopted laws were not harmonized with the EU directives and were only partly harmonized with the TRIPs. The Law on Industrial Property adopted in 2002 covered patents, trademarks, designs and geographical indications and designations of origin collectively. However, one of the requirements, as part of BiH's accession into the EU and the harmonization of its

legislation with the EU, was to make separate laws for each area, which wasn't the case with the adopted law. Furthermore, the collective management of copyright and related rights wasn't regulated under the Copyright law. It was therefore essential to create a separate law, mainly to allow a wider and more complete way of regulating this area.

In 2010, second regulatory reform was implemented, during which state level laws on patents, trademarks, topographies of integrated circuits, geographical indications, industrial design, copyright and related rights, and collective management of copyright were adopted (Refer to Appendix 1, **IP Related Laws and Regulations in Bosnia and Herzegovina**). The legislation has been further approximated with the TRIPs and the *acquis*. However, BiH still needs to align its IPRs related policies and laws in the audiovisual field (Commission of the European Communities, 2010). The Law on the Protection of Geographical Indications and Designations of Origin is adjusted to increase the protection from unfair competition, while the inspection control is introduced in accordance with the TRIPs.

Although, an overall progress has been made in adopting IPRs related laws, there is still much to be done, as the legislation has to be further approximated with the TRIPs and the *acquis*. The regulatory framework for the collective management organizations is inadequate, as provisions regulating jurisdictions the Institute has in the process of establishment and administrative supervision of these organizations, as well as the obligations these organizations have toward the authors and holders of related rights, are very imprecisely defined, which only generates conflicts between different stakeholders. Finally, enforcement remains to be improved, since the main problem that disenables effective IPRs protection in BiH remains the fact that once a law has been adopted, the problem of its (non)implementation remains.

2.3 Enforcement of Intellectual Property Rights in Bosnia and Herzegovina

In the realm of IPRs protection and enforcement, both industrial property related laws and laws relating to copyright and related rights of BiH provide following types of protection:

1. Administrative protection,
2. Judicial protection,
3. Provisional measures,
4. Measures taken by the customs authorities, and
5. Penal protection for misdemeanors and offenses.

Institutions responsible for IPRs enforcement policy in BiH are presented in Table 5.

Table 5: Institutions Responsible for IPRs Enforcement Policy in BiH

Institutions responsible for IPRs enforcement policy	Establishing law
Indirect Taxation Authority	Law on Indirect Taxation System of BiH
Market Inspection of FBiH/RS	Law on Inspections in FBiH/RS
Court of BiH	Law on Court of BiH
Cantonal/Municipal Courts	
State Investigation and Protection agency (SIPA)	Law on the Agency for Information and Protection
Consumer Protection Council of BiH	Law on Consumer Protection in BiH
Ministry of Agriculture, Water Management and Forestry of FBiH/RS	Law on Agriculture, Food and Rural Development

Source: Development Strategy of the Institute for Intellectual Protection of BIH (2008–2015) 2008, p. 25.

Administrative protection in BiH, as it has been previously described, is conducted before the Institute, which is the only institution competent to carry out procedures for acquisition, maintenance, sale and lapse of different types of IPRs, as well as for conducting IPRs licensee register. Intellectual property offices frequently have quasi – judicial functions in the administration of industrial property systems, and provide a forum for procedures for contesting rights under consideration or granted by the office, known as opposition procedures (WIPO, 2004).

The term opposition refers to all possibilities third parties have to intervene before the Institute in the process of granting the right as well as its contesting after it has been granted. These problems usually occur in case of industrial property rights because their registration can be disputed, as opposed to copyrights and related rights which are conferred to the author by accretion and as such are not subject to any administrative or registration procedure.

In many countries there is no provision at all for opposition because the intellectual property office lacks the expertise (WIPO, 2004). This is the case with BiH, where no substantive examination is carried out before the Institute. Because of this, revocation before the courts is the only possibility in cases where applicant or right holder seeks cancellation or amendment of a competitor’s right.

Judicial protection is conducted before Cantonal/Municipal courts in BiH and Court of BiH, since the country still doesn't have specialized courts for IPRs infringement related cases. According to the industrial property related laws, most notably Patent Law (*Official Gazette of BiH*, no. 53/10), in the case of industrial property rights infringement, court authorities are empowered to order:

- **Prohibition** of the continuation of infringement and of future similar infringements;

- **The recall** of the objects of infringement from the channels of commerce;
- **The definitive removal** of the objects of infringement from the channels of commerce;
- **Destruction** of means and objects intended or used in the infringement acts;
- **Publication judgment** at the expense of the infringer in media; and
- **Indemnification** for the damages.

In the cases of copyrights and related rights infringements and according to the Copyright and Related Rights Law (*Official Gazette of BiH*, no. 63/10), court authorities are empowered to order:

- **Prohibition** of the continuation of infringement and of future similar infringements;
- **Remedying** the situation caused by infringement;
- **Withdrawal** of the unlawfully made copies of the work and their packaging, of a performance or of any other subject matter protected by the law, from the channels of commerce;
- **Complete removal** of the unlawfully made copies of the work and their packaging, of a performance or of any other subject matter protected by the law, from the channels of commerce;
- **Destruction** of means and objects intended or used in the infringement acts; and
- **Publication judgment** at the expense of the infringer in media.

According to the laws regulating this area, the judicial authorities may also order provisional measures *inaudita altera parte*, i.e. without prior hearing of the other side, in the cases:

- When the applicant or the right holder provides justifiable, adequate evidence for the belief that the right is being infringed or that such infringement is imminent.
- To prevent the entry into the market of goods, including imported goods, immediately after the customs clearance.
- Where any delay is likely to cause irreparable harm to the right holder, or where there is a demonstrable risk of evidence being destroyed.

In the cases where the right holder has provided adequate evidence that his rights have been infringed or that its infringement is imminent through the importation or exportation of goods, customs authorities may order:

- Inspection of the goods by the owner or his representative,
- Seizure or exclusion of the goods from trade, and
- Destruction of the goods.

Border measures are intended to prevent infringing copies from being brought into the country and they constitute an effective way to counter acts of infringement, because it is

relatively easier to prevent the distribution of infringing copies at the border than after the copies have already been brought into the country and put into circulation (WIPO, 2004). Border measures in BiH are carried out by administrative authorities (customs authorities), and not by judicial authorities. The Customs sector is part of the Indirect Taxation Authority of BiH (hereinafter: the ITA), which is the **only** state level institution responsible for ensuring the quality and authenticity of goods, fighting against trafficking in prohibited goods and substances, as well as for the prevention of illegal movement of goods and people. However, neither of the laws regulating this area stipulates detailed provision on the proceedings before the customs authorities; the specific proceedings are defined in the special regulations (Vignjević, 2010b).

According to the Head of Public Relations Department, Mr. Ratko Kovačević, currently, there are confiscated goods worth approximately €5, 5 million stored in the ITA warehouses around the BiH (Kovačević, R., personal communication, March 28, 2011). Approximately €4 millions of the mentioned amount are confiscated on the basis of *res judicata*, i.e. judgment with final force and effect, while slightly more than €1, 5 million is confiscated temporarily and is used as material evidence in the IPRs related cases conducted before the judicial authorities.

Among the goods located in the ITA warehouses is the number of goods that can not currently be sold. For instance, a large number of cars that have been seized due to customs violations, can not be sold because they do not meet the standards defined by the statutory legislation regarding importation of cars in the BiH, and therefore can not be put into circulation or be registered in BiH.

In certain verdicts related to goods confiscated due to customs violations, competent court does not issue specific instructions what to do with the confiscated goods. In this case, the ITA in accordance with the Decision on the Sale of Customs Goods sells such goods through an auction or direct sales. If the seized goods couldn't be sold by an auction or direct sale, there is a possibility for the goods to be donated.

Since among the goods definitely confiscated on the basis of *res judicata*, there are items that might be useful to many humanitarian and other organizations in BiH, in 2009 the ITA, in accordance with the Council of Ministers instructions, made a list of approximately €175.000 worth of goods that can be donated (Kovačević, R., personal communication, March 28, 2011). The Council of Ministers has entrusted the Ministry of Human Rights and Refugees of BiH to adopt an act which would regulate the distribution of these goods mainly in the returnee settlements in the FBiH, RS and Brčko District (DB). Majority of the donated goods are clothing and household items. Distribution of goods seized for customs violations has already been made in mid 2007.

Finally, penal protection for misdemeanors and offenses is provided by the industrial property rights and copyright related laws. According to the laws regulating this area when

deciding the claim for the payment of penalty, the court takes into account all the circumstances of the case, in particular the extent of the damage incurred, the degree of guilt of the infringer, the amount of agreed or usual remuneration, and the preventive purpose of the penalty. A legal entity may be fined for misdemeanor in the amount ranging from €500 to €100.000, and the entrepreneur may be fined in the amount ranging from €500 to €10.000, or be sentenced to up to three years in prison for serious offenses.

Despite having established legal basis for the protection and enforcement of IPRs, actual enforcement of IPRs in BiH is the weakest link of the IPRs system and remains to be improved. The ITA referred files to the Prosecutor's Office and seized counterfeit goods valued at approximately €622.500 during 2010 (Commission of the European Communities, 2010) (Refer to Appendix 3, Value of the Seized Goods per Product Type). However, high levels of piracy persist, including the widespread use of unlicensed software in both commercial and public enterprises. According to the Federal Administration for Inspection Issues' website, software piracy rate at 66% decreases yearly tax revenues for nearly \$14 million and possibility for 1.400 new job places in IT related industries to be open (Public Relations, 2012).

Market inspectors and customs and border police lack the equipment and expertise necessary to perform investigations and subsequently commence cases against infringers, judiciaries don't have the necessary training or experience with IPRs related issues, and above all coordination among different enforcement bodies at various levels remains inadequate or non existent. Also, a reliable system for collecting, analyzing and exchanging data among the various institutions involved is lacking (Commission of the European Communities, 2011). As there is no effective intellectual property protection without the enforcement of the IPRs and no effective intellectual property enforcement without the proper, formal legal education in this respect, it absolutely necessary for BiH to improve the legal and general education in the field of IPRs in order to successfully create an effective and functional system of IPRs protection.

2.4 Creating a New Intellectual Property System – Challenges

Although certain progress has been made in the process of creating functional and effective IPRs system in BiH, there are still many areas where there has been no significant development or improvement. First problem is the fact that the Institute as a central point of the system lacks administrative and operational capacity to effectively deal with procedures related to acquisition and subsequent protection of granted rights. One of the best examples is that administrative procedure for granting industrial property rights, most notably patents, is such that patents are granted without prior substantive examination of the application, which shifts burden of proof of validity on to the patent holder who may lack the capacity or resources to validate the request. As a result, the wait time for processing application and issuance of right is two years which is still unacceptably long if

we take into account that the right is granted without prior substantive examination. Despite the importance of the Institute as the foundation on which the entire system rests and problems that it is facing, this institution still lacks sufficient support from the government to make serious progress in IPRs reform.

Furthermore, the Institute is not linked with other institutions responsible for IPRs protection and enforcement policy, which are fragmented between several competing agencies and levels of government. Additional problem is existence of vicious circle in the functioning of these institutions, because in cases where government agencies are well intentioned and motivated to do their job well they are hampered by the lack of capacity, while others have the capacity to act but are not making sufficient effort to change anything. Overall, activities conducted by these institutions are more sporadic rather than part of a comprehensive strategy.

Enforcement is an integral part of any effective IP system. However, although IPRs are private rights and their protection is, foremost, the responsibility of their respective holders, it is up to state to ensure that adequate sanctions are in place to protect and enforce IPRs. The main problem that disables effective IPRs protection in BiH remains the fact that once a law has been adopted the problem of its implementation remains. Thus, there has been only a *de jure* improvement in the exercise of intellectual property rights, while the *de facto* situation is either stagnant or deteriorating (Helsinki Committee for Human Rights in Bosnia and Herzegovina (HCHR), 2010).

At the state level, enforcement of IPRs is sole responsibility of the ITA, which is responsible for implementation of border measures for which it lacks expertise and sufficient legislation. The lack of enforcement of IPRs and the existence of cheap, easy available, illegal products has created a hostile environment that makes efforts to establish a legitimate protection system for different forms of IPRs very difficult. According to the Commission of the European Communities (2011), enforcement remains to be improved since an enforcement strategy involving all relevant stake holders does not exist as well as coordination between enforcement bodies at various levels. If the progress is to be made BiH has to make significant effort to improve enforcement related problems, because it is well – known that right without remedy is not right at all.

3 RESEARCH STUDY ON “PROTECTION OF INTELLECTUAL PROPERTY RIGHTS IN BOSNIA AND HERZEGOVINA”

The research process begins with an overview of the research methodology and formulation of the research questions. The process is then continued with the description of the process itself, including the questionnaire, data details, and finally analysis and the interpretation of the results obtained through the questionnaire.

3.1 Research Methodology

The foremost purpose of this research work is to evaluate the perceptions of the stakeholders regarding different issues concerning protection of IPRs in BiH and to identify strengths and weaknesses in order to point out areas of strength and figure out potential areas of intervention that ought to be addressed by policymakers during any potential reform efforts.

Research activities include preparation of a thematic study depending on the reform needs and priorities that are identified partly by the Development strategy of the Institute and the different reports on progress BiH made in this specific area. The survey is focused on a law and regulation subject with a view to related reforms through analyzing existing regulatory framework and examining the state of implementation. The main objective of the opinion survey is to gather useful data and to deliver an analytical and statistical report for the country. In addition, the survey will generate an overall picture of the different respondents' points of view and identify trends that may be of interest to the different stakeholders.

Basically, this research process, as well as the paper, consists of two main parts: theoretical part and the empirical part of the conducted research study. The theoretical part includes literature reviews conducted to assess information and data on the subject through website search, internet search for e-books, electronic access to official publications and journals of different institutions posted on their respective sites. The theoretical part is covered by two major chapters, portraying important theoretical aspects of the researched subject matter.

The empirical part is based on the responses yielded through the internet mediated questionnaires, targeting 200 stakeholders in the country through random sampling basis. Resulting data was then subject to three main types of analysis:

1. Univariate analysis, to generate a number of descriptive statistics of the single variables and their attributes,
2. Bivariate analysis including cross tabulations, whenever significant and/or useful for the research and
3. Index analysis.

Index analysis is used whenever the question is aimed at assessing importance/satisfaction or effectiveness/satisfaction aspect of the certain factor or subject included in the survey. Indices are intended to reflect the average agreement and satisfaction of different respondents, and are formed by calculating the arithmetic mean of the answers provided by all respondents per question.

Every question is then given two numerical scores, relating to the “importance” and “satisfaction” dimension, calculated as mentioned previously. The following task is to classify resulting scores into two equally sized classes: scores that are less than or equal to 3 (low) and scores that are greater than 3 (high). The result is a 4 – quadrant classification where importance/effectiveness and satisfaction ratings are distributed.

Figure 3: Importance/Satisfaction Chart

SATISFACTION	CELL B Low importance High satisfaction	CELL C High importance High satisfaction
	CELL A Low importance Low satisfaction	CELL D High importance Low satisfaction
	IMPORTANCE	

The above figure presents the resulting classification, where the horizontal axis presents “importance”, and the vertical one “satisfaction”. For instance, if question received 3, 78 score for the “importance” and 1, 52 for the “satisfaction” this question/factor would belong to cell D, implying high importance and low satisfaction. Finally, each of the cells highlights potential areas of intervention which will there fore be the central point of the analysis.

Primary and secondary data are used in the research process. The primary data is collected through the questionnaire while the secondary data on the subject is collected through sources such as annual reports of the Institute, Property Rights Alliance, WIPO, Indirect Taxation Authority of BiH, etc.

3.2 Research Questions

Essentially, the research process is aimed at addressing the following pertinent questions:

- The first research question is meant to understand: “What is the perception of the respondents about the IPRs protection as the generator of economic growth? Is the IPRs protection itself sufficient to encourage economic growth in BiH?”
- The second research question is aimed at investigating: “How effective are the current government strategies regarding the national IPRs enforcement policy and what activities could be undertaken in order to improve it?”
- The last question relates to: “What is the perception of the respondents about the key factors pertaining to the work and activities conducted before the Institute for Intellectual Property of BiH?”

3.3 Research Process – Questionnaire and Data Details

3.3.1 Questionnaire

The research process is initiated by formulating the questions which will constitute the questionnaire, in accordance to the research subject. The questionnaire itself is partly taken and developed from an analysis and assessment of public opinion and IPRs studies conducted by the Arab Center for the Rule of Law and Integrity (2009). However, the development of the questionnaire was also influenced by the context in which the survey was to take place, respondents' feedback (via pre testing and piloting), as well as the reform needs and priorities identified partly by the Development strategy of the Institute and the different reports on progress BiH made in this specific area.

The questionnaire is designed to obtain data on two different subject matters at the country level:

1. Laws and regulations, and
2. Country specific themes.

It is divided into four main sections: profile section, two survey proper sections in accordance with the two fore mentioned subject matters and the section for any comments or suggestions provided by the respondents, which will be appropriately incorporated in the results. The most of the questions is structured using the Likert format, where choices are provided for every question or statement. The choices will represent the degree of agreement each respondent has on the given question. The Likert survey is selected as a main questionnaire type, as it enables respondents to answer the survey easily.

Likert scale response formats are used in order to:

- Determine and assess the most important factors influencing the protection of IPRs in BiH.
- Understand challenges facing BiH in protection and enforcement of IPRs.

- Reveal the perceptions of the respondents and their perspectives on the issues rose in the survey.
- Assess, against the objectives put in front of BiH by the national legal system, as well as the international community, effectiveness and relevance of the measures undertaken, and their impact on the protection and enforcement of IPRs.
- Suggest possible changes or adaptations to be made to the existing system of the IPRs protection.

Internet mediated questionnaire is than delivered to 200 stakeholders in the country. The sample consists of two profiles or sub samples: private sector and public sector. Basically, respondents are chosen as a sample of employees appertaining to one of the two fore mentioned sectors (private or public), while the selection of a particular respondent is done by using random sampling method. Furthermore, the sample is distributed to include the two genders and to cover different age brackets, levels of education, qualifications, etc., in order to ensure that the questions reveal the required information and that results of the study can be generalized outside the sample group. Table 6 shows distribution of questionnaires indicating respondents belonging to the particular sector.

Table 6: Feedback from the Field

Sample	200	
Returned	167	100,00%
1. Private sector	116	69,46%
2. Public sector	51	30,54%

All the questionnaires were self administered through personal and business contacts with the individuals partaking in the survey. Respondents were requested to return completed questionnaires through e – mails/fax or telephonic response. No major problems were encountered in the process of conducting the survey. However, few limitations were raised by the respondents, namely, length of the questionnaire and difficulty they had in assessing the effectiveness of some of the items included in the survey. All respondents completed the survey anonymously which will hopefully provide more specific and valuable data.

3.3.2 Data Details

A survey was conducted targeting 200 stakeholders in the country. The sample consists of two profiles (or sub samples): private sector (116 respondents) and public sector (51 respondents). Entire research process took place from July till September 2011, while certain number of contacted respondents were either on vacation or too busy to participate in this relatively long survey. Number of respondents did not find it easy to assess the effectiveness of the factors or work of the institutions included in the survey. Consequently, the entire research process yielded 167 total number of responses or 83, 50% response rate.

The filed survey covered 167 respondents: 103 male (62%) and 64 female (38%). A comparison of the gender composition by subgroups, presented in Table 7, reveals that males outnumber females in both sectors. However, this is more emphasized in the private sector where the proportion of females is represented with 34%, compared to the presence of males represented with 66%.

Table 7: Gender – wise Frequency and Percentages by Subgroups

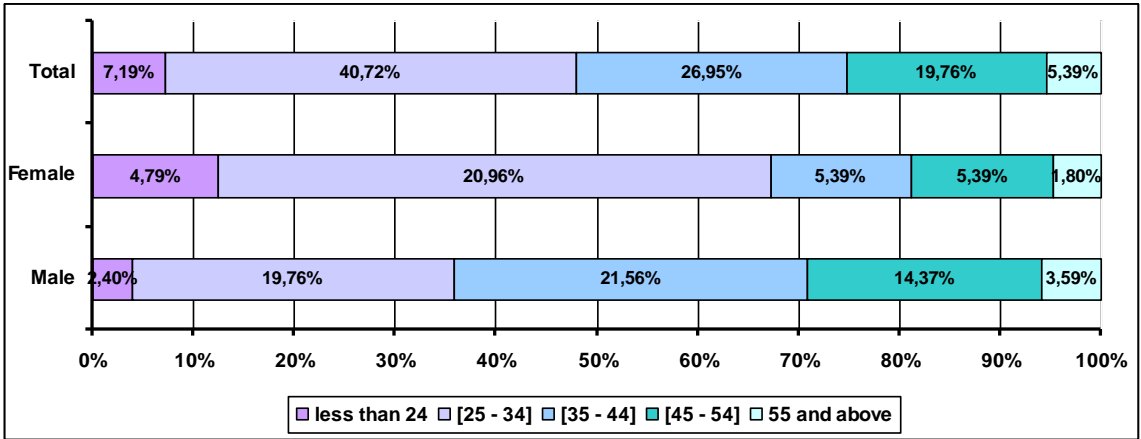
Gender	Private sector	Percentage	Frequency
Male	76	45, 51%	76
Female	40	23, 95%	40
Total	116	69, 46%	-
Gender			
Male	27	16, 17%	27
Female	24	14, 37%	24
Total	51	30, 54%	-
Grand total	167	100, 00%	167

Age profile of the respondents is presented in Table 8, along with the percentage and frequency. The survey shows that 87% are between 25 and 54 years of age. The age profile was than cross tabulated with the type of the sector and gender revealing that private sector respondents are significantly younger, with 44% being younger than 35 years. Furthermore, as shown by Figure 4, female respondents are considerably younger with the average age of 34, as opposed to 41 for males.

Table 8: Age Profile of the Respondents by Subgroups

Age	Private sector	Public sector	Percentage	Frequency
Less than 25	10	2	7, 19%	12
[25–34]	64	4	40, 72%	68
[35–44]	27	18	26, 95%	45
[45–54]	12	21	19, 76%	33
55 and above	3	6	5, 39%	9
Total	116	51	100, 00%	167

Figure 4: Age Brackets by Gender



The educational level of the respondents by gender and subgroups is presented in Figure 5 and Table 9 respectively. More than half of the respondents (54%) hold undergraduate degrees (BA/BS), while 11% have PhDs. Both genders seem to be highly educated with 38% having postgraduate degrees. On the other hand, percentage of undergraduates is higher among males (40%), while the percentage of masters is slightly higher among females (17%). Furthermore, survey reveals that public sector respondents seem to be slightly less educated than private sector respondents in terms of undergraduate and postgraduate degrees, with private sector respondents holding 60% of the mentioned degrees, as opposed to 21% of the public sector respondents. On the other hand, public sector is more educated in terms of PhDs.

Figure 5: Highest Educational Level Achieved by Gender

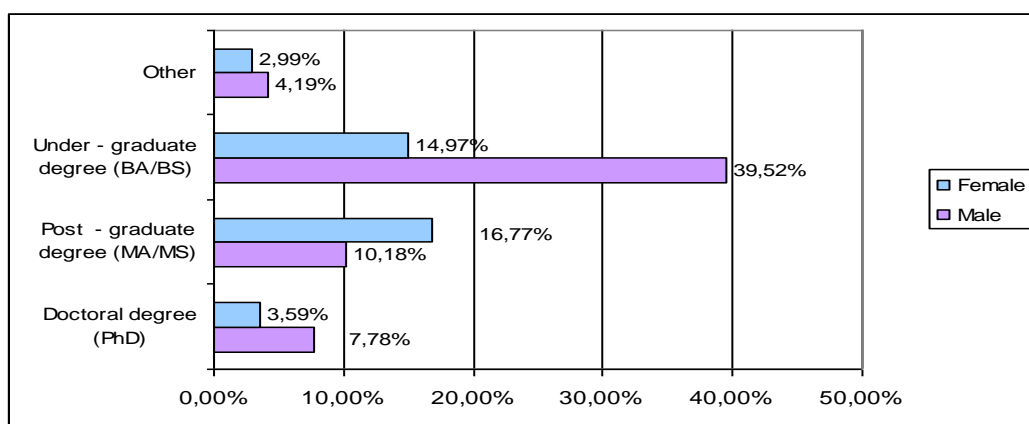


Table 9: Highest Educational Level Achieved by Subgroups (frequency)

Educational level	Private sector	Public sector
Doctoral degree (PhD)	7	12
Postgraduate degree (MA/MS)	27	18
Undergraduate degree (BA/BS)	74	17
Other	8	4
Total	116	51

3.4 Research Analysis and Results

3.4.1 General Perceptions

Before turning to research questions, in order to investigate general perceptions respondents have on pertinent subject matters, respondents are asked the following set of questions. Yielded results are than tabulated, showing the mean value, mode, median and standard deviation to enable objective analysis and interpretation.

In order to evaluate how familiar are the respondents as well as the BiH's citizens with the IPRs concept, following questions are asked (Table 10). The results are somewhat two folded. On the one hand, respondents feel that the formal understanding of IPRs and its

importance is very low among the citizens of BiH. The average mean score for the question stands at 2, 07 rating points which is considerably low, with 67% of the respondents perceiving people to be quite unfamiliar with the concept. On the other hand, with the average mean score at 3, 77 rating points, 55% of the respondents themselves opted to be strongly and quite familiar with the concept. Although there were no major discrepancies registered among the answers given by different sub samples, it is noteworthy that in both cases public sector respondents gave the highest rating scores.

Table 10: Respondents'/People's Familiarity Perception by Subgroups

	Completely unfamiliar	Quite unfamiliar	Neither	Quite familiar	Strongly familiar	Mean	Median	Mode	STD DEV
Q3_3 To what extent do you think are people in your country familiar or unfamiliar with the concept of IPRs?									
Private sector	16	78	20	2	0	2, 07	2	2	0, 61
Public sector	7	34	9	1	0	2, 08	2	2	0, 62
Q3_4 To what extent are you familiar with the concept of IPRs?									
Private sector	2	19	39	32	22	3, 51	3	3	0, 99
Public sector	0	4	6	24	16	4, 04	4	4	0, 87

Respondents are then asked to rate familiarity of the citizens with the IPRs related laws and regulations, respect of the mentioned laws as well as the frequency of their enforcement. Tabulated results reveal following insights (Table 11 and Table 12). The results show that 59% of the respondents think that people are not informed about the existence of the laws regulating IPRs protection. Indeed, both ratings are below average. The private sector respondents reported highest rating at 2, 27 rating points which is still significantly low. Regarding the respect of the mentioned laws, almost half of the respondents feel that the laws and regulations governing the subject are somewhat respected. On the other hand 40% of the respondents maintained their dissatisfaction with the related subject, perceiving laws and regulations to be strongly disrespected or quite disrespected.

Table 11: Perceptions about Familiarity of IPRs Related Laws and Regulations

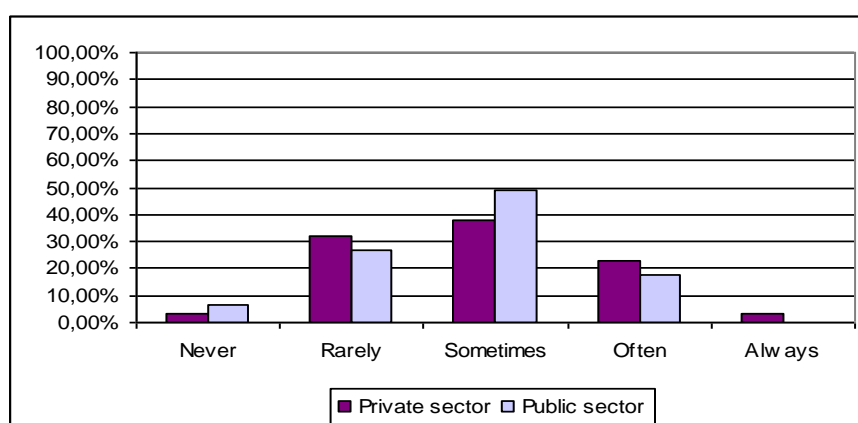
	Completely unfamiliar	Quite unfamiliar	Neither	Quite familiar	Strongly familiar	Mean	Median	Mode	STDEV
Q2_2 To what extent do you think are people in your country familiar or unfamiliar with IPRs related laws and regulations?									
Private sector	15	63	29	9	0	2, 27	2	2	0, 78
Public sector	4	35	6	6	0	2, 21	2	2	0, 75

Table 12: Perceptions about Respect of IPRs Related Laws and Regulations

	Strongly disrespected	Quite disrespected	Somewhat respected	Quite respected	Strongly disrespected	Mean	Median	Mode	STDDEV
Q2_1 To what extent do you consider that IPRs related laws and regulations are respected by people in your country?									
Private sector	15	32	54	11	4	2,63	3	3	0,94
Public sector	6	14	23	7	1	2,67	3	3	0,92

Finally, results regarding perceptions about the enforcement of the pertinent laws are presented in Figure 6. As we can see 71% of the respondents believe that laws and rules related to IPRs protection are not enforced in BiH on a regular basis. Almost half of the public sector respondents (49%) feel that laws are sometimes enforced, as opposed to 38% of the private sector respondents. Although the answers are generally very similar, it is important to note that private sector respondents seem to be more dissatisfied with the state of the enforcement.

Figure 6: Enforcement of IPRs Related Laws and Regulations Perception by Subgroups



3.4.2 Respondents' Perception about IPRs Protection and Economic Growth

The first research question is aimed at investigating whether respondents perceive IPRs protection policy as the important factor that could affect economic growth. Furthermore, the intention is to gauge respondents' perceptions about how important IPRs protection is for economic growth in BiH, current state of other different factors affecting economic growth, and possible areas of improvement based on satisfaction ratings given by respondents. The hypothesis formulated on these issues is:

Hypothesis 1: “Appropriate IPRs protection is perceived as necessary but not sufficient for encouraging economic growth in BiH. Unfavorable business environment is still perceived as one of the key factors hampering economic growth.”

Based on the above premise, specific questions are asked in order to gauge respondents' perceptions regarding fore mentioned subject matters. Respondents are first asked how familiar they are with the effects IPRs protection may have on economic growth. Responses to this question are tabulated as in the Table 13 showing the mean value, median, mode and standard deviation for the question, for both sub samples. As we can see almost half of the respondents claim to be somewhat familiar with the effects IPRs protection may have on economic growth. Private sector respondents seem to be slightly more familiar with the subject as 40% feel that they are quite or strongly familiar, as opposed to 30% of the public sector respondents. Although no major discrepancies are registered among the answers it is noteworthy that 27% of the respondents expressed (as a note in General Comments of the questionnaire) that they rather opted to be quite unfamiliar with the subject than stating that they are familiar without knowing exactly through which mechanisms are these effects on economic growth achieved.

Table 13: Respondents' Familiarity Perception by Subgroups

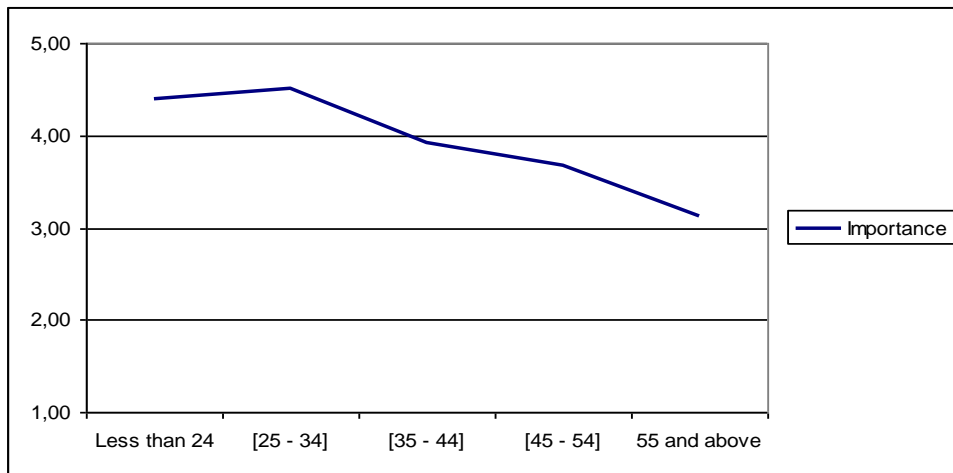
	Strongly unfamiliar	Quite unfamiliar	Somewhat familiar	Quite familiar	Strongly familiar	Mean	Median	Mode	STD DEV
Q2_3 To what extent are you familiar or unfamiliar with the effects IPRs protection may have on economic growth?									
Private sector	8	13	45	36	7	3, 19	3	3	0, 98
Public sector	5	4	23	12	2	3, 04	3	3	0,97

Respondents are then asked whether they perceive IPRs protection as important for encouraging economic growth in BiH. High percentage of the respondents (73%), consider IPRs protection as important for promoting investment and economic growth in BiH, with 47% of respondents reporting “very high importance”. On a scale of 1 (Very low importance) to 5 (Very high importance) the overall rating given by respondents is equal to 4, 14 rating points. As we can see from Table 14 no major deviations are registered among sub samples. However, it is noteworthy that a lower level of agreement is registered among higher age brackets (Figure 7). Level of importance is highest for [25–34] age bracket and it equals 4, 40 average rating points. This could reflect increased level of awareness about importance of IPRs protection among younger generations, which are more technically oriented and because of that are more likely to view the illicit use of products, such as unlicensed software, in negative light.

Table 14: IPRs Protection Importance for Encouraging Economic Growth Perception by Subgroups

	Very low importance	Low importance	Average importance	High importance	Very high importance	Mean	Median	Mode	STDDEV
Q3_1 In your opinion, how important is the protection of intellectual property rights for encouraging investment and growth in Bosnia and Herzegovina.									
Private sector	1	4	27	28	56	4, 15	4	5	0, 96
Public sector	1	1	11	15	23	4, 14	4	5	0, 95

Figure 7: IPRs Protection Importance for Economic Growth by Age



On a scale of 1 (No losses) to 5 (Very high losses), respondents are asked about their perceptions regarding the level of economic losses resulting from the infringement of IPRs in BiH (Table 15). Respondents clearly indicate that they perceive economic losses due to IPRs infringement in BiH to be high. The results among sub samples are similar, the mean score on the question is quite high at 4, 04 rating points, with 79% of the respondents agreeing to the contention.

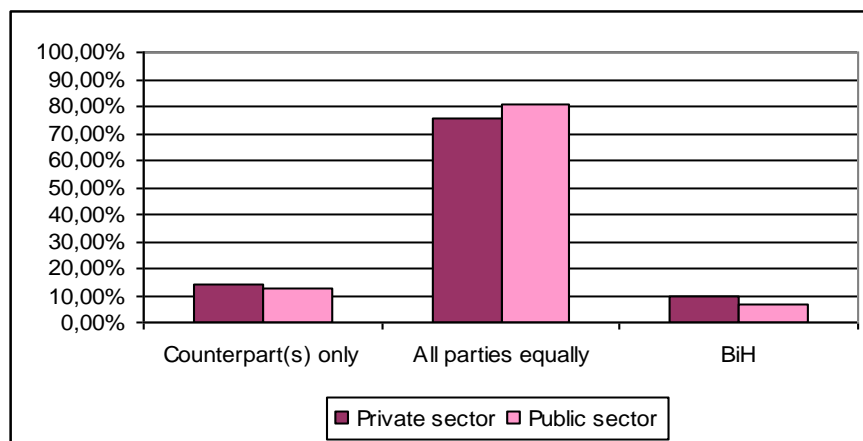
Table 15: Economic Losses Due to IPRs Infringement

	No losses	Minimum losses	Average losses	High losses	Very high losses	Mean	Median	Mode	STDEV
Q3_14 In your opinion, what is the level of economic losses resulting from the infringement of the IPRs in Bosnia and Herzegovina?									
Private sector	0	0	26	46	41	4, 13	4	4	0, 76
Public sector	0	2	6	32	10	4, 00	4	4	0, 69

Respondents are then asked whether they think BiH is the main beneficiary of the signed IPRs protection bilateral and/or multilateral agreements and whether they consider joining the WTO to be important for economic growth in BiH. Results show that 77% of the

respondents consider bilateral and multilateral agreements to be lucrative for all parties equally. However, respondents feel that these agreements are designed to benefit all parties equally and that in normal circumstances **should** be equally useful for everybody, but that in majority of the cases BiH doesn't fully exploit all that they offer.

Figure 8: Evaluation of the IPRs Protection Agreements by Subgroups



Results from the Table 16 below, show that respondents consider joining the WTO to be important for economic growth in BiH, as well as for improving IPRs protection and anti – piracy efforts. However, it seems that respondents perceive joining the WTO to be of higher importance for IPRs protection policy than for stimulating economic growth in the country. Respondents have given similar responses to the questions, with no major deviations reflected through standard deviation measure registered among the answers given by the respondents within the same sample as well as among different sub samples.

Table 16: Importance of Joining WTO Perception by Subgroups

	Very low importance	Low importance	Average importance	High importance	Very high importance	Mean	Median	Mode	STDDEV
Q3_12_1 To what extent is joining the World Trade Organization important for economic growth in Bosnia and Herzegovina?									
Private sector	4	9	26	54	20	3,64	4	4	0,98
Public sector	2	3	6	24	8	3,78	4	4	0,98
Q3_12_2 To what extent is joining the World Trade Organization important for IPRs protection policy?									
Private sector	2	4	21	33	54	4,24	4	5	0,96
Public sector	0	2	8	17	22	4,20	4	5	0,86

Furthermore, it is important to mention that the above two sets of results reveal two types of correlation. First, the level of importance decreases as the age increases (Figure 9). Second, the level of importance decreases as the educational level increases (Figure 10). It appears that older generations and more educated individuals are more skeptical about the

importance of joining the WTO and the role it may play in encouraging economic growth and improving IPRs protection policy.

Figure 9: Importance of Joining the WTO by Age

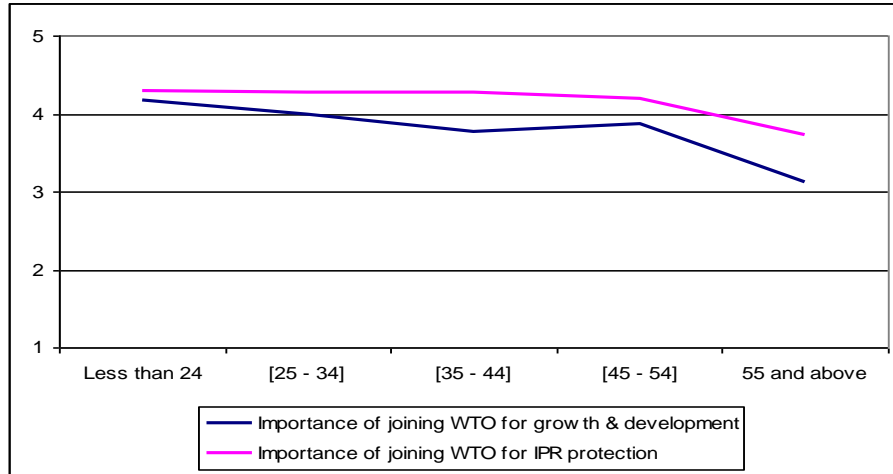
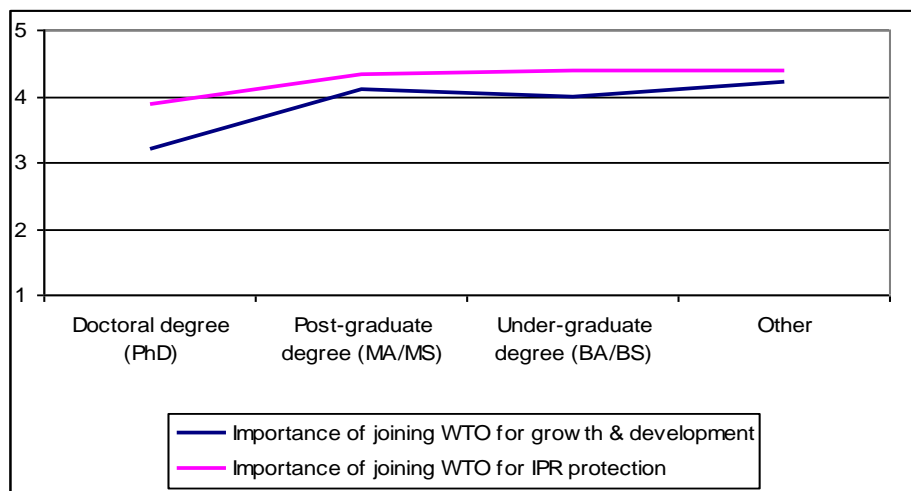


Figure 10: Importance of Joining the WTO by Highest Educational Level Achieved



On a scale of 1 (Very low importance) to 5 (Very high importance), respondents are asked to give importance ratings to a variety of factors affecting economic growth, notwithstanding IPRs protection. The results revealed following insights (Figure 11). All the factors are perceived to be important, with the importance ratings moving within a range of 3.73 to 4.52 rating points, which is significantly high. However, the highest rating is given by private sector respondents and public sector respondents, to “Controlling unofficial payments to public officials” with 4, 48 and 4, 52 rating points respectively. Ninety percent of the private sector respondents and 87% of the public sector respondents consider it the most important factor affecting economic growth in the country. Responding to this question, respondents have agreed that bureaucracy in the country is non transparent, complex and subject to corruption. When asked why they consider this specific factor to be critical for economic growth, respondents stated that cost of corruption

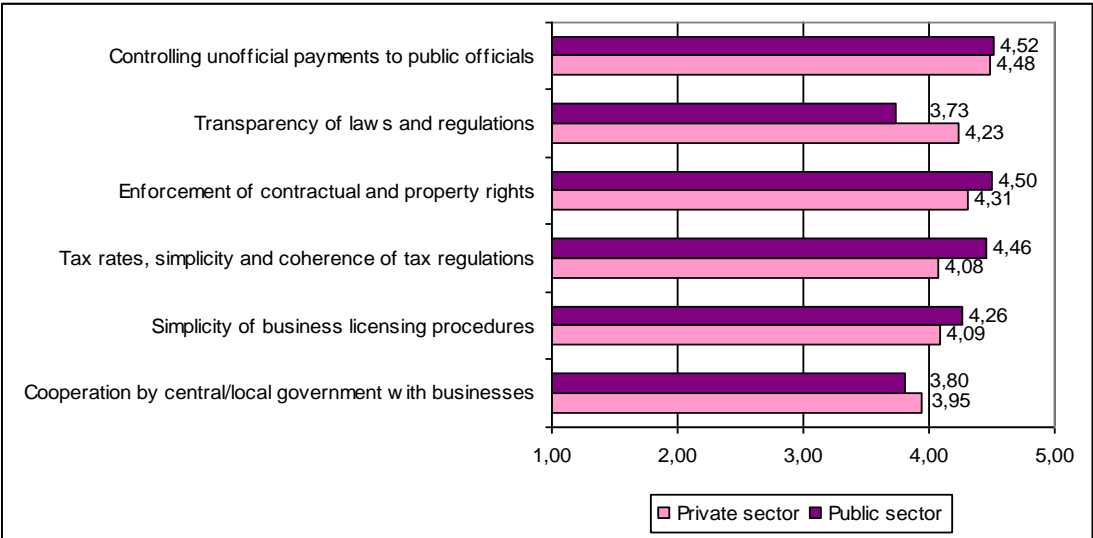
in BiH is significantly underestimated since it includes not just sums of money lost in the process, but also the cost of inhibited development and increased inequalities which can't be quantified as easily.

Respondents also feel that the “Simplicity (or in the case of BiH complexity) of business licensing procedures” adds momentum to the fore mentioned corruption problem. Eighty – one percent of the respondents feel that complicated and time consuming administrative procedures when applying for business licenses or permits create an environment in which “service fees” are often demanded. Respondents also strongly believe that this complex process, susceptible to corruption, increases cost of doing business in the country, which consequently hampers economic growth.

The lowest importance rating of 3, 73 rating points is given to “Transparency of laws and regulations”, quite surprisingly by public sector respondents. Although importance rating for this specific factor is the lowest among all factors, it is still reasonably high; respondents simply opted to give priority to other factors which they consider more complex and important. This factor is followed by “Cooperation by central/local government with businesses” with 3, 87 average rating points. Generally, respondents expressed in agreement that there is no use in cooperation with government bodies as long as those bodies are corrupted and related administrative system monstrously large.

Answers given by sub samples are similar with no major deviations registered. Question regarding the importance of “Tax rates, simplicity and coherence of tax regulations” obtained the highest value of a standard deviation. The standard deviation measure for this question at 1, 35, reflects difference of opinion amongst respondents as 16% remained neutral, while 14% chose to give low importance to the contention.

Figure 11: Importance Ratings for the Factors Affecting Economic Growth



After having determined importance ratings for the pertinent factors, the following set of questions is asked in order to gauge the perceptions respondents have on the current status of these factors in BiH (Table 17).

Table 17: Satisfaction Ratings for Factors Affecting Economic Growth

	Very low satisfaction	Low satisfaction	Average satisfaction	High satisfaction	Very high satisfaction	Mean	Median	Mode	STDDEV
Q2_7_1 Cooperation by central/local government with businesses									
Private sector	12	64	30	1	0	2, 19	2	2	0, 63
Public sector	7	18	19	2	1	2, 40	2	3	0, 87
Q2_7_2 Simplicity of business licensing procedures									
Private sector	26	49	37	0	0	2, 10	2	2	0, 74
Public sector	6	26	12	1	0	2, 18	2	2	0, 68
Q2_7_3 Transparency of laws and regulations									
Private sector	32	36	39	0	0	2, 06	2	2	0, 81
Public sector	7	17	25	2	0	2, 43	2	3	0, 77
Q2_7_4 Enforcement of contractual and property rights									
Private sector	29	52	33	2	0	2, 08	2	2	0, 78
Public sector	10	16	10	5	4	2, 49	2	2	1, 20
Q2_7_5 Tax rates, simplicity and coherence of tax regulations									
Private sector	37	39	39	0	1	2, 04	2	2	0, 85
Public sector	16	18	6	4	2	2, 09	2	2	1, 10
Q2_7_6 Controlling unofficial payments to public officials									
Private sector	106	9	1	0	0	1, 09	2	1	0, 32
Public sector	17	12	15	3	1	2, 14	2	2	1, 04

Both profiles of the sample seem to have similar importance and satisfaction perceptions about the listed factors. In general, the groups of analysis are quite dissatisfied (2, 10 ratings points) with all the factors they perceived to be important for economic growth and development (4, 20 rating points). As it was previously mentioned, respondents are asked to give satisfaction ratings to several factors pertaining to economic growth. According to the results, respondents are substantially dissatisfied, with satisfaction ratings moving within a range of 1, 09 to 2, 49 rating points.

“Controlling unofficial payments to public officials”, which received highest importance rating, received the lowest satisfaction rating of 1, 09 rating points. Among private sector respondents 91% express very low satisfaction regarding the current state of the mentioned factor, as opposed to 35% of the public sector respondents. This means that respondents

feel that corrupt public officials significantly contribute to economic losses when their corrupt activities result in the investors or ordinary citizens having to pay additional costs for services they are entitled to without having to make “facilitation payments”. Respondents state that BiH's extremely complex administrative apparatus abounds corruption opportunities, thereby increasing cost of doing business.

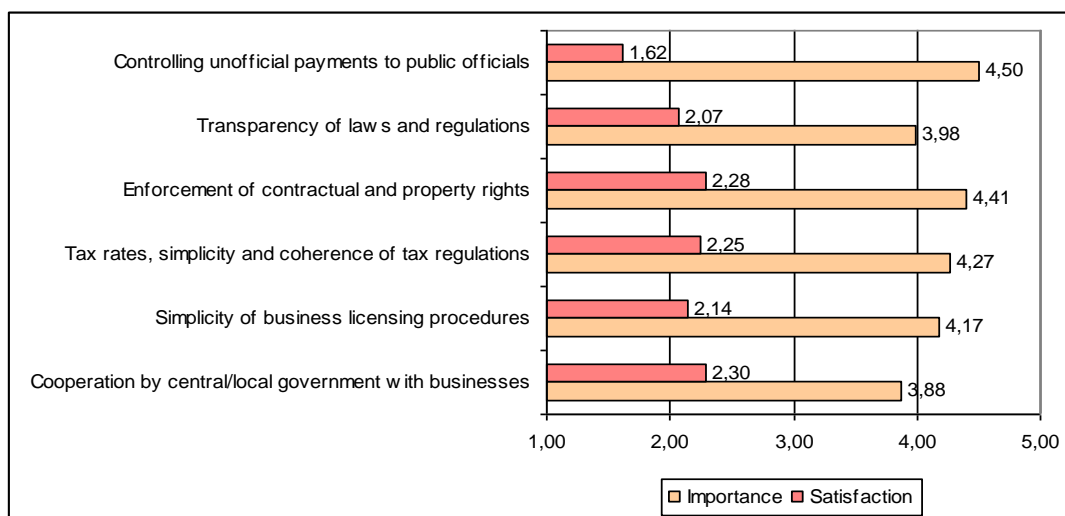
In terms of low satisfaction ratings, “Controlling unofficial payments to public officials” is followed by “Tax rates, simplicity and coherence of tax regulations” which paradoxically received one of the lowest importance ratings. Respondents feel that this factor doesn't have to be the most important for encouraging economic growth, but in the case of BiH and its myriad of state, entity and municipal administrations seriously burdens businesses and therefore inhibits economic growth.

The highest satisfaction rating is given to “Cooperation by central/local government with businesses” by both sectors. To recall, this factor received one of the lowest satisfaction ratings which supports respondents' statement that cooperation can be easily established but very hard achieved if the other side you are supposed to be cooperating with is corrupted. This factor is followed by “Transparency of laws and regulations” as nearly 60% of the respondents feel that laws and regulations are generally transparent but very rarely respected and enforced.

Three out of six questions registered slightly high standard deviation; all cases being among the answers given Public sector respondents. In two of the cases (1, 20 and 1, 04) the standard deviation measure reflects difference in opinions, as almost the same number of respondents is divided among those opting for average satisfaction and those maintaining their dissatisfaction on the subject. In the case of the question with standard deviation at 1, 10, situation is similar with almost the same number of respondents being neutral on the subject and those maintaining their satisfaction.

In the light of all that has been mentioned, the comparative view of importance/satisfaction ratings of the listed factors is given in Figure 12 below. It is clearly visible that respondents' perceptions of the importance of the listed factors substantially exceed their satisfaction with the same factors. This indicates an urgent need for improving the current situation in order to fill the gap between these two aspects, with highest priority being given to the most important factors with the lowest satisfaction ratings.

Figure 12: Importance/Satisfaction Ratings for the Factors Affecting Economic Growth



3.4.3 Respondents' Perception about IPRs Enforcement Policy

The second research question is related to basic issues pertaining to the BiH's IPRs enforcement policy. The issue raised several questions which are included in the questionnaire to reveal respondents' perceptions on the current status of the measures undertaken, possible measures to be undertaken, and the perceived priorities aimed at improving current enforcement system. The hypothesis formulated on these issues is:

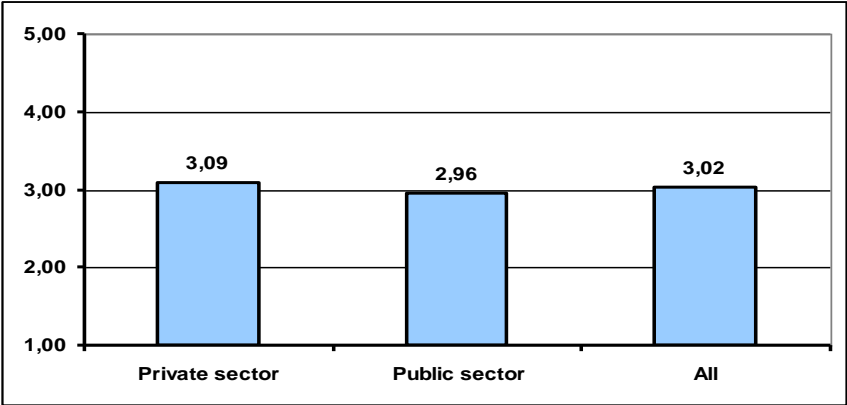
Hypothesis 2: “National laws are generally adequate in protecting intellectual property rights, but are not supported by an effective enforcement. National enforcement policies and strategies, where they exist, are ineffective and sporadic rather than part of a comprehensive strategy.”

Based on the above premise, specific questions are asked to gauge respondents' perceptions about different factors pertaining to BiH's IPRs enforcement policy. Questions are asked to evaluate the effectiveness of the possible enforcement measures as well as the respondents' satisfaction level with the measures currently in place. The respondents are given five options to indicate their answers ranging from very high effectiveness/satisfaction to very low effectiveness/satisfaction. In cases where considered important, answers are tabulated in order to show the mean value, median, mode, and standard deviation measures for answers given by sub samples in order to facilitate consequent analysis and interpretation of the results.

When asked about the enforcement of IPRs related laws and regulations, 71% of the respondents expressed that they are either sometimes or rarely enforced. The results delivered by sub samples, shown in Figure 13, are more or less similar. Surprisingly, private sector respondents seem to be more satisfied with the enforcement than public

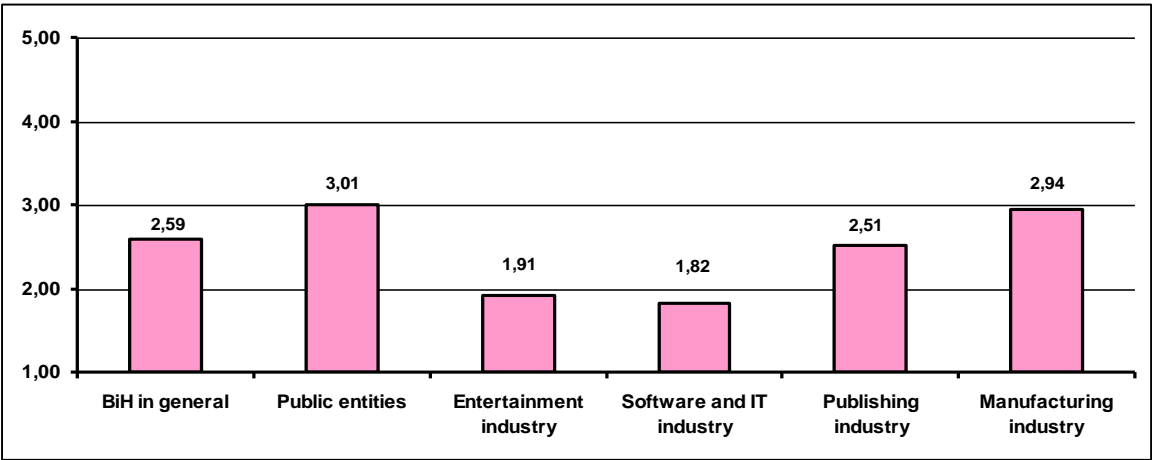
sector respondents, as 26% of the private sector respondents perceive laws and regulations to be enforced often or always, compared to only 17 % of the public sector respondents.

Figure 13: Perceptions about Enforcement of IPRs Related Laws and Regulations by Subgroups



Respondents are then asked to rate their perceptions regarding the enforcement efforts in BiH in general as well as in different sectors of economic activity on a scale of 1 (Never) to 5 (Always). No major deviations or discrepancies are registered among sub samples. The results reveal following insights. As presented in Figure 14 below, the ratings for the majority of the sectors are below the average, with the sole exception of public entities which received highest rating, although this rating is only slightly above average (3, 01). The level of the enforcement efforts in BiH in general is perceived to be clearly less than average at 2, 59 rating points. However, level of the enforcement activities, perceived by respondents, in the software and IT industry, came at the bottom of the list with only 1, 82 rating points, followed by the entertainment industry with 1, 91 rating points.

Figure 14: Enforcement Efforts by Field of Activity



On a scale of 1 (Very low effectiveness) to 5 (Very high effectiveness) respondents are asked to rate the effectiveness level of the current government policies regarding the

enforcement of IPRs protection and anti – piracy efforts of both literary and artistic property rights and industrial property rights. The results given by respondents of a specific sector as well as those delivered by sub samples are similar, with no major discrepancies registered among sub samples. According to Table 18 below, the current government policies are perceived to be significantly ineffective in both cases (2, 28 and 2, 50 respectively). As expected, the lowest rating of 2, 01 rating points is reported by private sector respondents referring to the enforcement of literary and artistic property rights.

Table 18: Effectiveness Ratings of Current Government IPRs Enforcement Policy

	Private sector	Public sector	Private sector	Public sector
	Q3_7_1 In your opinion how effective are current government policies in enforcing IPRs protection and anti – piracy efforts? Literary and artistic property rights.		Q3_7_2 In your opinion how effective are current government policies in enforcing IPRs protection and anti – piracy efforts? Industrial property rights.	
Very low effectiveness	25	4	18	5
Low effectiveness	52	16	38	4
Average effectiveness	24	24	48	29
High effectiveness	1	3	2	5
Very high effectiveness	0	0	0	0
Mean	2, 01	2, 55	2, 32	2, 79
Mean	2	3	2	3
Mode	2	3	3	3
STD/DEV	0, 72	0, 73	0, 77	0, 79

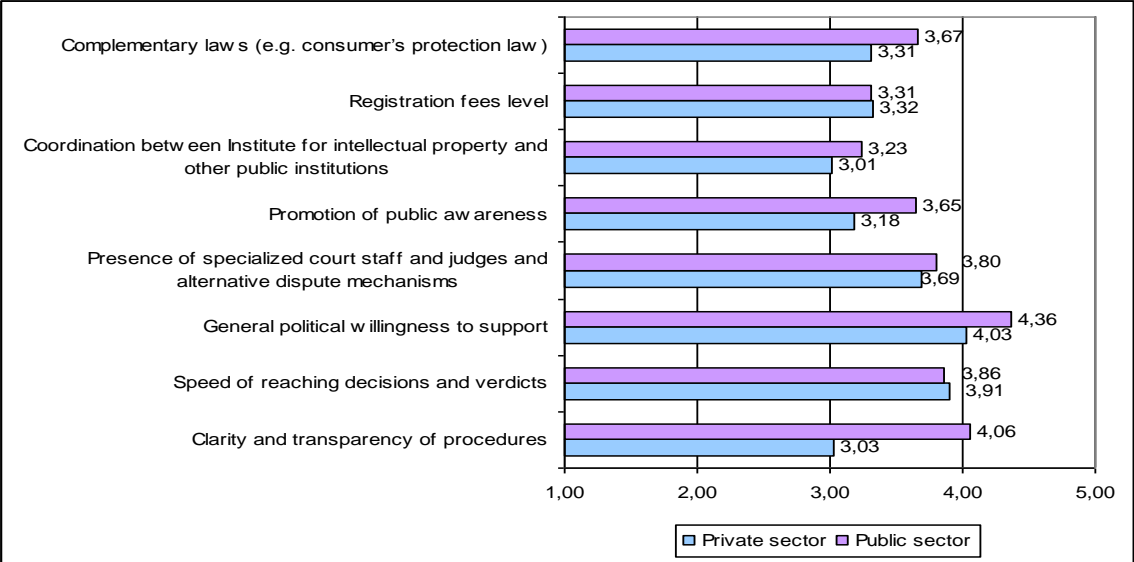
After having determined perceptions they have about the effectiveness of the enforcement policy in the realm of different types of IPRs, respondents are then asked to rate the effectiveness of the measures that could be undertaken in order to improve current enforcement system. The results reveal significant insights (Figure 15). Quite surprisingly, all effectiveness ratings given by private sector respondents, move within a range of 3.0 to 3.5 rating points which is relatively average. On the other hand, public sector respondents gave high effectiveness ratings for majority of the proposed measures.

The highest effectiveness rating of 4, 20 rating points is given to “General political willingness to support”, where 69% of the private sector respondents and 79% of the public sector respondents feel that the lack of political support and general negligence of this area by the government inhibits the effectiveness of the measures to be undertaken as part of the national enforcement strategy. Willingness to support is followed by the “Speed of reaching decisions and verdicts” and “Presence of specialized court staff and judges and alternative dispute mechanisms”. That reveals the chronic problem of the BiH's IPRs system and judicial system in general which is the fact that BiH's judicial system provides no means for quick resolution of IPRs related disputes, specialized courts don't exist and non – judicial dispute mechanisms in majority of the cases are nonexistent.

The lowest effectiveness rating of 3, 01 rating points is surprisingly given to “Coordination between the Institute and other public institutions” by private sector respondents. Respondents reinforced their opinion by stating that coordination between different institutions could be effective only in cases where other prerequisites such as financial and administrative support and the effectiveness of the individual institutions forming the IPRs system, is achieved. They feel that there is no sense in creating effective system out of institutions which as the separate entities are not effective. Majority of the other lowest ratings are also given by private sector respondents, who in the process of filling in the questionnaire stated that they think these measures could be effective but only provided that certain changes and adjustments are made to different aspects of BiH's legal, administrative and business environment.

The measures presented through standard deviation, ranging from 1, 01 to 1, 36 on the results of all the answers of listed questions, except “General political willingness to support”, present discrepant and deviated perception of the respondents toward the pertinent, proposed measures. All the respondents are unanimous in their stand that political willingness and support are essential for the creation and functioning of the effective enforcement system. On the other hand, difference in opinions relating to other factors, as presented by standard deviation measures, stems from the fact that respondents feel that all of the measures could generally be effective, if implemented on a regular basis and not sporadically which obviously didn't yield any significant results in the case of BiH.

Figure 15: Effectiveness Ratings for Factors Pertaining to IPRs Enforcement Policy



After having determined respondents' perceptions regarding the effectiveness of the proposed IPRs enforcement measures, the following set of questions is asked in order to gauge the perceptions they have on the current status of these factors (Table 19).

Table 19: Satisfaction Ratings for Factors Pertaining to IPRs Enforcement Policy

	Very high satisfaction	High satisfaction	Average satisfaction	Low satisfaction	Very low satisfaction	Mean	Median	Mode	STD DEV
Q3_10_1 Clarity and transparency of procedures									
Private sector	30	49	28	5	0	2,07	2	2	0,83
Public sector	3	13	19	3	3	2,75	3	3	0,96
Q3_10_2 Speed of reaching decisions and verdicts									
Private sector	39	58	12	2	0	1,79	2	2	0,70
Public sector	4	17	17	5	1	2,59	3	3	0,89
Q3_10_3 General political willingness to support									
Private sector	49	51	12	1	0	1,71	2	2	0,72
Public sector	19	14	10	3	0	1,93	2	1	0,94
Q3_10_4 Presence of specialized court staff and judges and alternative dispute mechanisms									
Private sector	31	41	36	3	0	2,10	2	2	0,84
Public sector	8	13	11	6	3	2,58	2	2	1,17
Q3_10_5 Promotion of public awareness									
Private sector	35	43	19	3	3	1,99	2	2	0,95
Public sector	11	18	10	5	4	2,44	2	2	1,19
Q3_10_6 Coordination between Institute for intellectual property and other public institutions									
Private sector	32	47	21	6	0	2,01	2	2	0,85
Public sector	6	16	6	4	3	2,48	2	2	1,55
Q3_10_7 Registration fees level									
Private sector	21	35	46	5	0	2,33	2	3	0,84
Public sector	6	8	19	4	2	2,69	3	3	1,01
Q3_10_8 Complementary laws (e.g. consumer's protection law)									
Private sector	17	38	44	7	1	2,41	2	3	0,86
Public sector	4	10	15	6	4	2,90	3	3	1,10

As it was previously mentioned, respondents are asked to give satisfaction ratings to several factors pertaining to IPRs enforcement policy. The results reveal following. Respondents are generally dissatisfied, with satisfaction ratings moving within a range of 1, 71 to 2, 90 rating points. The lowest satisfaction rating is given to “General political willingness to support” by both private sector and public sector respondents. This shows that 88% of the private sector respondents and 72% of the public sector respondents are highly dissatisfied with the current status of this factor. Respondents, while responding to the question, stated that they consider that IPRs enforcement policy lacks much needed

political willingness to support and that this specific area is not priority for the national government.

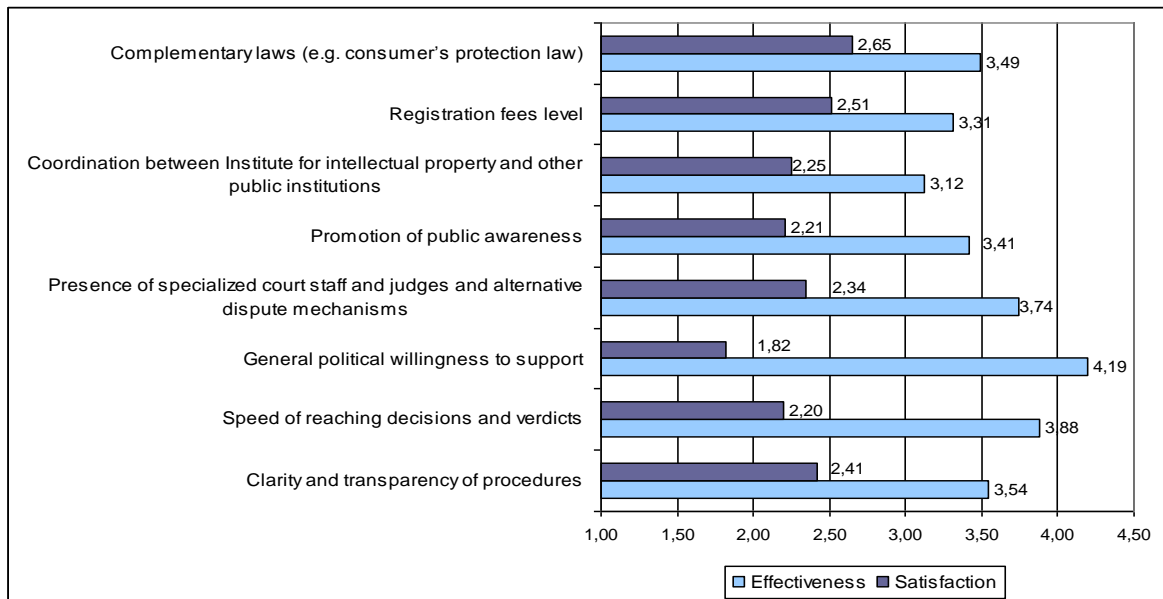
In terms of low satisfaction ratings, “General political willingness to support” is followed by “Speed of reaching decisions” and “Coordination between the Institute and other public institutions”, both given by private sector respondents. Low satisfaction ratings of 1, 79 and 2, 01 rating points show that respondents perceive current enforcement system and measures undertaken to be slow and ineffective, as 87% and 74% of the respondents in the mentioned cases (respectively) express very low and low satisfaction concerning the current status of these factors in BiH. The low and relatively similar mean score for these two factors stems from the fact that they are closely interconnected. Respondents strongly believe that speed of reaching decisions is conditioned by weak and sometimes even nonexistent cooperation between competent public institutions. Furthermore, they consider poor cooperation between institutions to be direct result of the political games and distribution of power on national and different sub – national levels, which disables effective and political free decision making.

The highest satisfaction rating is given to existence of “Complementary laws (e.g. consumer’s protection law)”, by both private sector and public sector respondents. Seven percent of the private sector respondents and 26% of the public sector respondents express high satisfaction with the existence of complementary laws in the IPRs related legislation. However, respondents accentuate that they are satisfied with the existence of these laws, but not with their actual respect and enforcement. This also supports the statement that enforcement is the weakest link of the BiH's IPRs system.

Although respondents gave low satisfaction ratings for all factors listed, the degree of convergence among the answers of the sub samples must be addressed since answers given by public sector respondents show higher standard deviation. Standard deviation for the answers given by private sector respondents is low and reflects the fact that respondents were categorically dissatisfied with all the pertinent factors. Their answers are polarized toward very low and low satisfaction with virtually just few “highly satisfied” and only one “very highly satisfied” answer. On the other hand, answers given by public sector respondents are more spread out throughout the entire range of the possible answers, so the standard deviation measure for questions answered by public sector respondents reflects difference of opinion amongst respondents, which are not as strictly polarized as in the case of private sector respondents.

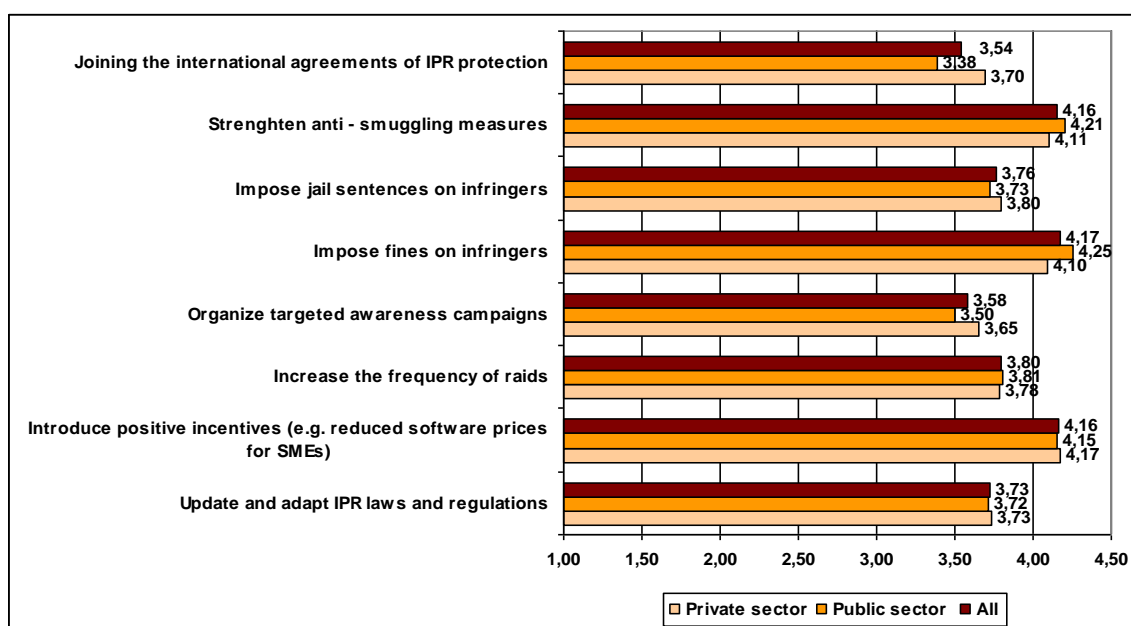
In the light of all that has been mentioned, the comparative view of effectiveness/satisfaction ratings of the listed factors is given in Figure 16 below. It is clearly visible that effectiveness of the proposed measures is either relatively average or very high, while the satisfaction ratings for the measures already in place are significantly low.

Figure 16: Effectiveness/Satisfaction Ratings for Factors Pertaining to IPRs Enforcement Policy



Bearing in mind all that has been mentioned, it comes as no surprise that all of the eight proposed IPRs enforcement measures received high priority ratings (Figure 17). The top perceived priority, with 4, 25 rating points, is to “Impose fines on infringers”, given quite surprisingly by public sector respondents. The lowest perceived priority, with 3, 38 rating points, is “Joining the international agreements of IPR protection”, given also by public sector respondents. Highest priority rating by private sector respondents is given to “Introduce positive incentives”. It is noteworthy that the measures which received highest priority ratings are based on reward/punishment or incentive/disincentive mechanisms. Public sector respondents seem to be more supportive of imposing system based on punishment which will act as a disincentive for IPRs violations. Private sector respondents on the other hand seem to be more supportive of the incentive measures, which could reflect a real need of BiH's businesses, the majority of them being SMEs, to receive certain economic and financial incentives to protect and respect IPRs.

Figure 17: Reform Priority Perception by Subgroups



3.4.4 Respondents' Perception about the Factors Pertaining to the Institute

Institution responsible for the establishment and protection of IPRs in BiH is the Institute for Intellectual Property of BiH. The third research question is aimed at investigating whether the Institute, as the central point on which the entire IPRs system rest, has sufficient human and financial capacities to deal with various and multiple tasks within its own jurisdiction. To achieve this, several questions related to the subject are framed to unveil respondents' perceptions regarding various aspects pertaining to the work of this institution. The hypothesis formulated on these issues is.

Hypothesis 3: “The Institute responsible for intellectual property governance in BiH is generally known to be understaffed and under – equipped, lacking government support, which results in sub optimal performances of tasks carried out under its competence.”

First question is aimed at investigating whether the Institute has sufficient operative and financial capacity to successfully deal with tasks under its own jurisdiction. As we can see from Table 20, respondents feel that the Institute lacks capacity to deal with the tasks conducted before it. However, public sector respondents seem to be more convinced of the statement, as 67% of them agrees or strongly agrees with the contention compared to 63% of the private sector respondents.

Table 20: Evaluation of the Institute's Capacity by Subgroups

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Mean	Median	Mode	STDDEV
Q3_5 To what extent do you agree or disagree with the following statement: Institute for Intellectual Property of BiH doesn't dispose of sufficient financial and human resources to successfully execute tasks within its competences.									
Private sector	4	10	27	53	18	3,64	4	4	0,98
Public sector	1	4	10	22	9	3,74	4	3	0,94

The above finding is also corroborated with the statement that “IPRs policy reform is a priority for the national government” which yielded very low mean score of just 1, 82 rating points, showing that 78% of the respondents disagree with the contention. As expected, public sector respondents gave slightly higher, but still low rating score of 2, 02 rating points, with no other significant discrepancies registered among the answers given by the respondents of different sub samples. It shows that respondents feel that the Institute's activities are not appropriately backed up by the government and that the government doesn't perceive them to be of a critical importance for the country.

Since one of the Institute's main activities is drafting laws and implementing regulations in the domain of intellectual property, the following questions are asked to evaluate how much has been accomplished in this specific realm and where did those activities positioned BiH compared to other countries. The responses related to the following questions are presented in Table 21.

Listed questions yielded somewhat different results. The mean score for the responses by private sector respondents for all three questions equals 2, 80 rating points. On the other hand, the mean score for the responses given by public sector respondents is slightly above the average and it equals 3, 40. The overall score for all three statements revolves more or less around 3, which is relatively average. However, it is noteworthy that private sector respondents gave the lowest ratings for all questions. Only question given positive (above average) rating is one concerning access to IPRs laws and regulations, where 50% of the respondents opted to agree with the contention.

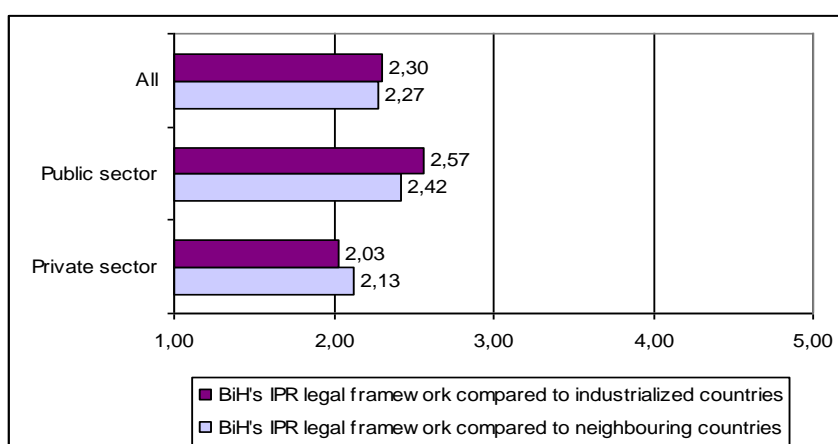
The divergence among the answers given mainly by public sector respondents, as measured by standard deviation (ranging from 1, 02 to 1, 12), presents a contrasting view respondents have on the pertinent questions. In these cases respondents have either remained neutral or opted to strongly disagree or strongly agree with the contention, with answers spread out across the whole range of possible answers. This causes difficulties to generalize findings, in a situation where almost exact number of respondents maintains neutral or opts to one of the extremes.

Table 21: Perceptions about the Institute's Legislative Activities by Subgroups

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Mean	Median	Mode	STD DEV
Q2_5_1 To what extent do you agree or disagree with the following statements? Access to, information related to IPRs related laws and regulations, is easy.									
Private sector	8	9	32	56	6	3,40	4	4	0,98
Public sector	1	6	9	23	9	3,69	4	4	0,98
Q2_5_2 To what extent do you agree or disagree with the following statements? Interpretations of IPRs related regulations are consistent and predictable.									
Private sector	9	36	40	23	1	2,73	3	3	0,91
Public sector	4	6	19	9	3	3,02	3	3	1,02
Q2_5_4 To what extent do you agree or disagree with the following statements? Institute's Legal department employs qualified and specialized staff.									
Private sector	19	48	36	4	2	2,28	2	2	0,85
Public sector	9	17	12	5	3	3,48	2	2	1,12

On a scale of 1 (Near the bottom) to 5 (Near the top), respondents are asked to classify BiH's IPRs legal framework in comparison to neighboring and industrialized countries. The IPRs legal framework is perceived by both sub samples to be less than average among neighboring countries as well as industrialized countries (Figure 18). The comparison with industrialized countries is quite less favorable with a rating ranging between 2.03 rating points given by private sector respondents and 2,13 rating points given by public sector respondents.

Figure 18: Classification of IPR Legal Framework in Comparison to Neighboring and Industrialized Countries



Finally, on a scale of 1 (Very low satisfaction) to 5 (Very high satisfaction) respondents are asked to evaluate the work and performance of the Institute. As shown in Table 22 below, the satisfaction level is low with no significant discrepancies among the two samples of

analysis. The lowest satisfaction rating at 1, 58 rating points, is given to “Independence from political interventions”, by private sector respondents who also gave the lowest ratings for the rest of the questions. Among private sector respondents 52% report very low satisfaction with the pertinent factor as opposed to only 15% of the public sector respondents. Respondents have a feeling that the Institute lacks credibility and regulatory independence since it allows political intervention on substantive issues.

The next lowest rating is given to “Speed of reaching decisions”, where 64% of the respondents are dissatisfied with the current state of the related factor. Respondents feel that operational capacities of the Institute are not linked with the actual needs, considering both insufficient number of employees as well as the skill gaps of the existing employees, which are not perceived to be qualified for the job. Opposed to this factor stands “Clarity and transparency of procedures” with the highest satisfaction rating at 3, 47 average rating points. Respondents state that administrative procedures conducted before the Institute tend to be somewhat lengthy and slow, but that they are generally clear and transparent.

No major deviations, as presented by standard deviation calculation, were registered among the answers within given samples, as well as among different samples. Generally, private sector respondents seem to be less satisfied with some of the listed factors, but overall ratings given by both samples are either below the average or very near to the average.

Table 22: Evaluation of the Institute for Intellectual Property of BiH

	Low satisfaction	Very low satisfaction	Average satisfaction	High satisfaction	Very high satisfaction	Mean	Median	Mode	STD DEV
Q3_8_1 Please rate your degree of satisfaction regarding the following factors pertaining to Institute for Intellectual Property of Bosnia and Herzegovina: General performance									
Private sector	13	29	33	1	0	2, 29	2	3	0, 76
Public sector	6	7	25	3	2	2, 72	3	3	0, 95
Q3_8_2 Please rate your degree of satisfaction regarding the following factors pertaining to Institute for Intellectual Property of Bosnia and Herzegovina: Independence from political interventions.									
Private sector	51	37	10	0	0	1, 58	1	1	0, 67
Public sector	5	4	23	1	0	2, 61	3	3	0, 78
Q3_8_3 Please rate your degree of satisfaction regarding the following factors pertaining to Institute for Intellectual Property of Bosnia and Herzegovina: Technical competence.									
Private sector	15	31	33	4	1	2, 34	2	3	0, 86
Public sector	1	1	6	11	3	3, 63	4	4	0, 93

Table continues

Continued

Q3_8_4 Please rate your degree of satisfaction regarding the following factors pertaining to Institute for Intellectual Property of Bosnia and Herzegovina: Speed of reaching decisions.									
Private sector	26	44	14	1	0	1, 88	2	2	0, 71
Public sector	1	7	23	3	5	3, 10	3	3	0, 93
Q3_8_5 Please rate your degree of satisfaction regarding the following factors pertaining to Institute for Intellectual Property of Bosnia and Herzegovina: Clarity and transparency of procedures.									
Private sector	6	8	35	29	7	3, 27	3	3	0, 98
Public sector	1	4	4	23	9	3, 85	3	4	0, 95

3.4.5 Evaluation of Results

Based on tabulation of data and its analysis, the results of the research study indicate the various aspects of the IPRs protection in BiH, as set out by the research questions. The degree of convergence, among the answers for the majority of the questions, reported by two sub samples is low (in some cases even negligible) which adds credibility to the importance of the findings.

The results of the research study strongly indicate that formal understanding of the IPRs concept among citizens is very low, as is understanding of the effects IPRs may have on economic growth. On the other hand, there is a widespread awareness of IPRs infringements and the lack of enforcement of the mentioned rights.

Responding to the specific query, 73% of the respondents expressed that they consider IPRs protection as important for promoting investment and economic growth in BiH. Even though results show that respondents find IPRs protection to be important for encouraging economic growth, it is noteworthy that perceived level of importance decreases as age increases, implying that younger generations are more aware of it is exceptional importance. Survey results also present that respondents perceive level of economic losses resulting from the infringement of IPRs in BiH to be high.

Furthermore, the research findings indicate that respondents consider formalization of the BiH's membership in the WTO to be more important for improving IPRs protection and enforcement standards than for the economic growth itself. It emerged that among the respondents, older and more educated individuals are more skeptical about the importance of joining the WTO and the role it may play in encouraging economic growth and improving IPRs protection policy. On this issue, respondents also feel that signing bilateral and multilateral agreements of IPRs protection may be useful for all the parties involved, but that in majority of the cases BiH doesn't know how to take on all that they have to offer.

Survey results also present findings regarding importance of and satisfaction with various factors affecting economic growth in BiH, rather than IPRs protection. All of the six listed factors (Refer to Appendix 5, Questionnaire with Results) are perceived to be highly important for encouraging economic growth, but the satisfaction with the current state of each of the factors is very low. Although the responses given by sub samples are similar it is noteworthy that public sector respondents seem to be more satisfied with the current state of the pertinent factors, as opposed to private sector respondents who expressed their deep dissatisfaction with each of the listed factors.

Keeping in view the above mentioned factors, the research findings indicate that majority of the respondents (89%) think that “Controlling unofficial payments to public officials” is the most important factor affecting economic growth. Respondents stated that they consider this factor to be critical for economic growth since it includes not just sums of money lost in the process, but also the cost of inhibited development and the resulting increased inequalities. Respondents have also stated that complex and complicated state administration is quite susceptible to corruption, which is the problem that remains prevalent in many political and economic institutions.

Respondents perceive the above factor to be closely related to the other important factor affecting economic growth which is “Simplicity of business licensing procedures”. The majority of the respondents (81%) have expressed that the “Simplicity of business licensing procedures” increases the fore mentioned corruption problem. They consider demanding “service fees” when applying for business licenses or permits to be undermining country's interests, not just by diverting resources from their intended use but also by damaging country's business reputation. Respondents also strongly believe that corruption problem, increases cost of doing business in the country, which consequently affects growth.

“Transparency of laws and regulations” is perceived to be the least important for encouraging economic growth. However, it is important to emphasize, that although this factor received the lowest importance rating among other listed factors, its perceived importance is still reasonably high. This factor is followed by “Cooperation by central/local government with businesses”. Generally, respondents expressed in agreement that they don't see how cooperation can be useful in cases where government bodies are corrupted and related administrative system monstrously large and complex.

In the light of what has been mentioned, it is clearly visible that respondents' perceptions of the importance of the factors affecting economic growth substantially exceed their satisfaction with the same factors. Furthermore, results indicate that they perceive improvement of these factors more important for encouraging economic growth, than improving IPRs protection which also can not be achieved without appropriate reform of the mentioned issues. This indicates an urgent need for improving the current situation in

order to fill the gap between these two aspects, with highest priority being given to the most important factors with the lowest satisfaction ratings.

Another significant aspect of the IPRs protection in BiH is the enforcement of these rights. Survey results indicate that respondents believe very little is done in BiH regarding the enforcement of IPRs. Respondents have expressed in large numbers (71%) that IPRs are not enforced on a regular basis, or in other words that they are enforced rarely or sometimes, with additional 5% of the respondents believing that IPRs are never enforced. Regarding the degree of respect of IPRs protection and enforcement efforts in BiH in general as well as in different sectors of economic activity, respondents believe that enforcement of IPRs in BiH in general is below average, with the worst results achieved in the software and IT industry, closely followed by the entertainment industry.

Another pertinent aspect of the IPRs enforcement policy in BiH is the government effort made in this specific realm. Responding to the query on effectiveness of the current government policies regarding the enforcement of both literary and artistic property rights and industrial property rights, a good percentage of the respondents view current government efforts to be significantly ineffective in both cases. It is noteworthy, that private sector respondents are the ones who gave the lowest effectiveness rating, referring to the enforcement of literary and artistic property rights.

Further more, judging by the effectiveness scores given to the measures proposed that could improve current enforcement system (Refer to Appendix 5, Questionnaire with Results) respondents feel that the proposed measures could result very effective if properly implemented. Quite surprisingly, public sector respondents gave the highest effectiveness ratings for the majority of the proposed measures, while the effectiveness ratings given by private sector respondents are relatively average.

Among the pertinent factors, “General political willingness to support” is perceived to be the most effective, with 72% of the respondents opting to this specific measure. High percentage of the respondents feels that the lack of political support and general negligence of this area by the government inhibits the effectiveness of the measures to be undertaken as the part of the national enforcement strategy. Willingness to support is followed by the “Speed of reaching decisions and verdicts” and “Presence of specialized court staff and judges and alternative dispute mechanisms”. This indicates the major problem of the BiH's IPRs system, and that is the nonexistence of the specialized institutions and non – judicial dispute mechanisms that would in certain measure increase timely resolution of disputes. The lowest effectiveness rating is given to “Coordination between the Institute and other public institutions”. Respondents feel that effective intellectual property system can not be created until the effectiveness of the individual institutions forming the system is improved.

However, on effectiveness of the proposed activities (except “General political willingness to support” and “Registration fees level”), difference of opinion is evident from the responses as the deviated views are above 1, 0 of the standard deviation measure. This reveals that respondents believe that the proposed measures could generally be effective, but only if implemented systematically and on a regular basis.

Results of the respondents' satisfaction with the current government efforts in this specific area provided following insights. Respondents are generally dissatisfied with all the pertinent factors, with private sector respondents reporting the lowest satisfaction with each of the listed factors. The lowest satisfaction is expressed in the relation with “General political willingness to support”. With 88% of the private sector respondents and 71% of the public sector respondents highly dissatisfied with the current status of this factor, the results clearly indicate that IPRs enforcement policy lacks much needed political willingness to support and that this specific area is not properly backed by the national government.

In terms of low satisfaction ratings, “General political willingness to support” is followed by “Speed of reaching decisions” and “Coordination between the Institute and other public institutions”. Respondents perceive current enforcement system and measures undertaken to be slow and ineffective. The low and relatively similar mean score for these two factors reflects the fact that they are interconnected. Respondents believe that speed of reaching decisions is a direct result of deplorable level of cooperation between competent institutions. Furthermore, they consider the poor cooperation between institutions to be considerably affected by political meddling in functioning of these institutions.

Although respondents gave low satisfaction ratings for all factors listed, the degree of convergence among the answers of the sub samples must be addressed since answers given by public sector respondents show higher standard deviation (ranging from 1, 01 to 1, 50). Standard deviation for the answers given by private sector is low and reflects the similarity of the responses given on the subject. On the other hand, answers given by public sector are not that strictly polarized which consequently makes it harder to generalize findings.

As regards determining the reform priorities, all of the eight proposed IPRs enforcement measures (Refer to Appendix 5, Questionnaire with Results) received high priority ratings. The top perceived priority by public sector (77%) respondents is to “Impose fines on infringers”, while the top perceived priority expressed by private sector respondents (76%) is to “Introduce positive incentives”. The lowest perceived priority is “Joining the international agreements of IPR protection”. The results indicate that public sector respondents seem to be more supportive of the disincentive measures, in contrast to private sector respondents who think that economic and financial incentives to protect and respect IPRs would be more effective.

Finally, research findings unveil respondents' perceptions regarding various aspects pertaining to the work of the Institute. Before results regarding specific questions are presented, it is very important to mention that this is the part of the research study that yielded the lowest response rate. The reason for this is the fact that 36% of the respondents have never heard of the Institute and are unaware of its existence. Responding to the specific query about whether the Institute has sufficient operative and financial capacity to successfully deal with the tasks under its own jurisdiction, around 60% of the respondents have agreed to the contention. The above finding is also corroborated with the statement that “IPRs policy reform is a priority for the national government”. It showed that respondents feel that the Institute's activities are not appropriately backed up by the government and that the government doesn't perceive them to be of an exceptional importance for the country.

Results on the Institute's legislative activities yielded somewhat different results, especially among the public sector respondents. Generally, respondents perceive results achieved in this specific area to be relatively average. The only above average rating is given to access to IPRs related law and regulations, which respondents perceive to be easy. However, the divergence among the answers given mainly by public sector respondents, as measured by standard deviation (ranging from 1, 02 to 1, 12), presents a contrasting view respondents have on the pertinent questions. In all three cases respondents have either remained neutral or opted to strongly disagree or strongly agree with the contention.

In order to evaluate the work and performance of the Institute several questions referring to different aspects of its activities are asked (Refer to Appendix 5, Questionnaire with Results). No major deviations, as presented by standard deviation calculation, are registered among the answers within given samples, as well as among different sub samples. Generally, public sector respondents seem to be more satisfied with the listed factors, but overall ratings given by both samples are either below average or very near to the average. The lowest satisfaction rating is given to “Independence from political interventions”, with 74% of the respondents resenting the fact that the Institute allows its decisions, mainly the ones related to staffing policy, to be politically and not professionally conditioned.

The next lowest rating is given to “Speed of reaching decisions”, with 64% of the respondents being dissatisfied with the current state of the related factor. Respondents believe that the Institute lacks qualified and professional employees who would be more capable of dealing with the fore mentioned problems the Institute is facing. The highest satisfaction is expressed with the “Clarity and transparency of procedures”. Respondents believe that procedures conducted before the Institute, are clear and transparent, although they can be somewhat slow.

4 RECOMMENDATIONS

The foremost purpose of this paper was to evaluate the perceptions of the stakeholders regarding different issues concerning protection of IPRs in BiH and to identify strengths and weaknesses in order to point out areas of strength and figure out potential areas of intervention that ought to be addressed by policymakers during any potential reform efforts. In order to do that an overall rating was calculated by classifying resulting scores into two main classes:

1. Scores that are less than or equal to 3 representing “weakness”, and
2. Scores that are greater than 3 representing “strength”.

Based on the above methodology, the two groups partaking in the survey identified several potential areas of improvement including:

- The results of the research study strongly indicate that formal understanding of the IPRs concept among citizens is very low, as is the awareness of how IPRs affect the economy. The proper, formal legal education in this respect is absolutely necessary for BiH in order to successfully create an effective and functional system of IPRs protection. There is an urgent need to conduct an awareness rising campaign through out BiH's mass media in order to develop basic legal culture among citizens and to obtain fundamental knowledge about the rights owners have, as well as mechanisms through which their rights can be protected. Introduction of regular courses at the law schools, availability of the postgraduate legal education and the availability of general non – legal courses for other types of education should become standard in the country, and at least partially financed by the institutions responsible for implementing IPRs protection and enforcement policy.
- The respondents have expressed a dissatisfaction with all the factors affecting economic growth covering cooperation of central/local government with business, business licensing procedures, transparency of laws and regulations, enforcement of contractual and property rights, tax rates and simplicity of tax regulations and controlling unofficial payments to public officials, that not only hinder economic growth but also normal functioning of the IPRs protection system as well. To overcome these problems different economic incentives should be introduced and the existing ones increased. Generally, the business licensing procedures should be less complex and lengthy, which would reduce opportunities for corruption and would expedite the process of establishing the business, without having to pay “additional payments”. Further, the power of politicians to meddle in economic activities should be taken away or substantially reduced. As long as government can arbitrarily set rules governing how business is conducted, business licensing procedures, set tax rates, etc., corruption problem will always be present. Enforcement of different property rights should be

guaranteed. However, it is very hard to recommend specific actions to be undertaken in these cases, since these actions are very dependent on country specific factors and could have multiple and uncertain effects. However, one thing is certain, and that is the fact that nothing can be done without proper government willingness to support which up till now has been non-existent or very absent.

- A significant problem which has to be specially taken care of in near future is the enforcement of IPRs. Up till now, enforcement activities were more sporadic rather than part of a comprehensive strategy, with majority of the respondents unaware of the efforts government has made in this specific realm. In the field of IPRs enforcement it is essential for BiH to develop a comprehensive strategy at the state level, to strengthen capacity of law enforcement agencies, provide legal and field training for judges, police, market inspectors and customs and border police who lack the equipment and expertise necessary to perform investigations and subsequently commence cases against infringers. A broad public awareness campaign should also be implemented since citizens don't perceive IPRs violations as criminal acts. Finally, if the progress is to be made and appropriate strategy to be successfully implemented, coordination among different enforcement bodies at various levels should be significantly improved.
- The research study indicates that the Institute as a central point of the system lacks administrative and operational capacity to effectively deal with procedures related to acquisition and subsequent protection of granted rights. The respondents have expressed dissatisfaction with the functioning of the Institute e.g. general performance, independence from political interventions, technical competence, speed of reaching decisions, etc. The Institute should increase its promotional activities, since one third of the respondents are unaware of its existence. There is an urgent need to upgrade institutional capacity not just in terms of the number of employees but also in terms of their specialization, especially those of legal expertise. Training of the existing staff as well as the incoming staff needs to be provided in order to improve and expedite administrative procedures conducted before the Institute.
- The respondents perceive nonexistence of the specialized courts and court staff, as well as the alternative dispute mechanisms in the IPRs related cases as one of the most important factors undermining the effectiveness of the current system of IPRs protection. Weak judicial structures and lack of non – judicial dispute resolution mechanisms impede timely, objective and effective resolution of IPRs related disputes. In order to expedite case processing, specialized divisions for IPRs matters within courts of general jurisdiction should be established. Specialization of judges should also be promoted as well as rotation of judges throughout these divisions so that majority of the judges are introduced with the IPRs related cases. Since BiH is relatively unfamiliar with these issues, exchange of information among judges should be promoted through formal education, regional conferences, study visits, etc.

- It is perceived that majority of the users of IPRs system, most notably SMEs, should be entitled to receive certain economic and financial incentives to protect and respect IPRs. Challenges that most SMEs are facing in acquiring IPRs protection include inadequate knowledge on different forms of IPRs and administrative procedures for their protection, lack of information on pre – filing procedures, high costs involved, particularly in the patenting process where substantive examination resides solely on them. If the Institute as the competent institution lacks sufficient expertise to execute these tasks it is illusory to think that SMEs will manage to do it on their own, without financial and professional help. All of this burdens SMEs and prevents them of using the IPRs effectively, so it is of an extreme importance to introduce special incentives in order to facilitate these issues whenever available or possible.

CONCLUSION

As it has already been mentioned, the foremost purpose of this paper was to evaluate the perceptions of the stakeholders regarding different issues concerning protection of IPRs in BiH and to identify strengths and weaknesses in order to point out areas of strength and figure out potential areas of intervention that ought to be addressed by policymakers during any potential reform efforts. In order to understand and evaluate core issues pertaining to the protection of IPRs in BiH, this research study has been carried out in order to give an objective assessment of the perceptions stakeholders have on different issues concerning the subject. The main issues emerged from the study will be set out in continuation.

The first research hypothesis pertains to: “Appropriate IPRs protection is perceived as necessary but not sufficient for encouraging economic growth in BiH. Unfavorable business environment is still perceived as one of the key factors hampering economic growth.” Responding to this issue, respondents have expressed their strong belief that improving IPRs protection itself would not be sufficient to encourage economic growth in the country. Indeed, respondents have agreed that IPRs protection is of a high importance for encouraging economic growth and investments and that economic losses resulting from the infringement of IPRs are high, but that mere improvement of IPRs protection standards wouldn't do much for a country whose economic policies are highly dysfunctional and business discouraging.

Widespread corruption, complex business licensing procedures, complex legal and regulatory framework, poor cooperation by central/local government with businesses, weak judicial structures and enforcement of property rights are all considered to be major inhibitors of economic growth in the country. Respondents have agreed that despite the country's efforts to improve economic growth, investors as well as ordinary citizens are faced with a number of serious obstacles, which in great measure hamper economic growth and development. They feel that systemic corruption is main factor crippling economic

growth. Respondents believe that BiH's complex administrative and legal system, susceptible to corruption, increases cost of doing business in the country, which consequently hampers economic growth. This is especially evident in the case of complex business registration and licensing process, where businesses are faced with multi – tiered legal and regulatory framework and thus with the environment in which “additional payments” are often demanded.

Furthermore, respondents feel that the entire social, legal and economic system is subject to political interference which impedes establishment of a successful cooperation between central/local government and business entities. Generally, respondents have expressed in agreement that there is no use in cooperation with government bodies as long as those bodies are corrupted and related administrative system complex. It seems that all of the mentioned problems originate from the complexity of the state administration. The myriad of national and sub national administrations create a system that lacks transparency, such system creates opportunities for corruption and corruption in turns impedes successful cooperation, which consequently makes finding appropriate solution for encouraging growth rather complicated.

Judging from the responses of the respondents in the survey on all the factors pertaining to economic growth, it is clearly visible that respondents' perceptions of the importance of the factors affecting economic growth substantially exceed their satisfaction with the same factors. It is noteworthy that public sector respondents seem to be more satisfied with the current state of the mentioned factors, as opposed to private sector respondents who expressed their deep dissatisfaction with each of the related factors. However, the important notion is that results indicate that respondents perceive improvement of these factors to be more important for encouraging economic growth, than improvement of IPRs protection, which also can not be achieved without appropriate reform of the mentioned issues.

The second question seeks to reveal whether: “National laws are generally adequate in protecting intellectual property rights, but are not supported by an effective enforcement. National enforcement policies and strategies, where they exist, are ineffective and sporadic rather than part of a comprehensive strategy.” Perceptions of the respondents on variety of issues like government efforts in enforcing IPRs, effectiveness and satisfaction level of current government policies and reform priorities are taken into consideration while investigating state of the BiH's IPRs enforcement policy. The majority of respondents find that IPRs are not enforced on a regular basis. Additionally they have expressed in agreement that the enforcement of IPRs in BiH in general, as well as in different sectors of economic activity, is below average.

On the issue of effectiveness of the current government policies regarding the enforcement of both literary and artistic property rights and industrial property rights, respondents view it to be significantly ineffective in both cases. Furthermore, respondents seem to be highly

dissatisfied with the current government efforts invested in promotion and implementation of IPRs enforcement related policies. Among pertinent factors affecting IPRs enforcement, lack of political willingness to support, speed of reaching decisions and coordination between the Institute and other public institutions are considered to be the most important.

It is observed from the findings that respondents believe that speed of reaching decisions is conditioned by the weak and sometimes even nonexistent cooperation between competent public institutions. Furthermore, they consider poor cooperation between institutions to be direct result of the political games and distribution of power on national and different sub – national levels, which disenables effective and political free decision making. All these factors significantly delay and limit timely resolution of IPRs related disputes. This is also conditioned by the lack of specialized courts and qualified staff, where in many cases people responsible for reaching decisions are politically eligible rather than competent to their job as intended. Therefore, nonexistence of coherent national enforcement strategy is considered to be the main stumbling stone of IPRs enforcement policy and BiH's IPRs system in general.

Another important observation on the subject of IPRs enforcement policy is determining reform priorities or measures that could be undertaken in order to improve current state of affairs. On the question of determining the reform priorities, all proposed measures are perceived to be highly important and much needed. The results indicate that public sector respondents are more supportive of the system based on punishment which will act as a disincentive for IPRs violations, since majority of them feel that imposing fines or jail sentences on the infringers would be the most effective.

Private sector on the other hand seems to be more supportive of the incentive measures, which could reflect a real need of BiH's businesses, to receive certain economic and financial incentives to protect and respect IPRs. Challenges that most SMEs are facing in acquiring IPRs protection include inadequate knowledge on different forms of IPRs and administrative procedures for their protection, lack of information on pre – filing procedures, high costs involved, particularly in the patenting process where substantive examination resides solely on them. All of this burdens SMEs and prevents them of using the IPRs effectively, so it is of an extreme importance to introduce special incentives whenever available or possible.

The third question pertains to: “The Institute responsible for intellectual property governance in BiH is generally known to be understaffed and under – equipped, lacking government support, which results in sub optimal performances of tasks carried out under its competence.” First thing that emanated from the results and that tells much of the Institute's promotional activities is the fact that one third of the respondents are unaware of its existence. Responding positively on the issue of the Institute's capacity to deal with the tasks under its competence, respondents have agreed that the Institute lacks operational and

administrative capacity, as well as government support, to successfully perform tasks conducted before it.

General response from the respondents on performance success concerning different aspects of the Institute's activities show a negative signal on the results achieved up till now. General performance of the Institute is perceived to be below average. Results also demonstrate that majority of the respondents perceive the Institute's decisions to be politically influenced. Respondents have a feeling that Institute lacks credibility and regulatory independence since it allows political intervention on substantive issues. Furthermore, speed of reaching decisions and technical competence of the Institute emerged as the areas that should be improved. Respondents have expressed that operational capacities of the Institute are not linked with the actual needs, considering both insufficient number of employees as well as the skill gaps of the existing employees, which are not perceived to be qualified for the job. Additionally, respondents stated that administrative procedures conducted before the Institute, tend to be somewhat lengthy and slow, but that they are generally clear and transparent, which is the only aspect of the Institute's activities that is perceived to be above the average.

No major deviations were registered among the answers given by different sub samples. Generally, private sector respondents seem to be less satisfied with performance achieved in some of the activities, but overall response given by both sub samples indicate that the Institute's performance is either below the average or very near to the average. Therefore, it is essential to improve current state, since the Institute is the central point around which the entire IPRs system is constructed.

While certain progress regarding IPRs protection policy in BiH has been made, it is evident that IPRs in BiH are not adequately protected. As we could see from theoretical and empirical part of the paper, despite efforts being made in order to improve state of the affair, BiH's IPRs protection policy is still in its infancy. Currently, BiH is at the stage of IPRs protection where it has provided a fairly complete and adequate legal framework and participation in international agreements, but has an institutional policy and enforcement system which are far from effective. However, it is noteworthy that these problems are not solely specific for IPRs system, but almost for every area of government activity, where reform processes and functioning of the institutions are often impeded by complicated state administration and marked by ethnic and political tensions.

There is a wide variety of problems preventing successful and effective protection to be achieved. First, the system suffers from a lack of institutional capacity, not just in terms of number of people employed in this area but also in terms of their expertise. Although staffing levels, most notably in the Institute, have improved over the past couple of years it is unlikely that majority of the newly employed staff will have prior experience and

expertise regarding different areas of IPRs related activities. As a result, the institutional capacity and more important competency will take time to develop.

Second, while legislation to enforce IPRs is present, actual enforcement is poor and inconsistent. Although IPRs are private rights and their protection is, foremost, the responsibility of their respective holders, it is up to state to ensure that adequate sanctions are in place to protect and enforce IPRs. The main problem that disenables effective IPR protection in BiH remains the fact that once a law has been adopted the problem of its implementation remains. Due to this fact it is often stated that BiH has only made a *de jure* improvement in the exercise of intellectual property rights, while the *de facto* situation is either stagnant or deteriorating.

The general lack of enforcement of IPRs makes the efforts to establish a legitimate protection system for different forms of IPRs very difficult, and has led to a situation in which citizens don't perceive IPRs violations as criminal acts. In addition, national and sub national institutions and agencies responsible for enforcement of IPRs are fragmented between several cross competing agencies and government levels, poorly coordinated and above all lacking the much needed expertise to improve the situation. As a result, BiH currently marks high levels of piracy and counterfeiting. As there is no effective intellectual property protection without the enforcement of the IPRs and no effective intellectual property enforcement without the proper, formal legal education in this respect, it is absolutely necessary for BiH to improve the legal and general education in the field of intellectual property rights in order to successfully create an effective and functional system of IPRs protection.

In conclusion, it may be emphasized once more that IPRs protection is a vital part of social, cultural, and economic development. However, protection of intellectual property rights alone will not ensure this development. As transition economy, such as BiH, becomes more integrated with the global economy, it comes under pressure from the international community to formalize its relationships through membership in the European Union and the WTO. Membership in such groups often requires adopting economic and political measures with multiple and uncertain effects. It is often stated that ultimately every country will benefit from these integration processes, but this is a mere speculation, as it is impossible to predict the long term impacts it could have on a country such as BiH. Over the years, in order to fulfill different obligations, BiH has adopted various laws regarding protection of IPRs, signed various international conventions, bilateral and multilateral agreements concerning this subject, but yet it seems that IPRs protection system does not provide full nor efficient protection. Ultimately, if we take into account all that has been mentioned, designing appropriate system of IPRs may, if we are not careful, introduce distortions that will have deteriorating effects on the country's interests.

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APPENDIXES

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Appendix 1: IP Related Laws and Regulations in Bosnia and Herzegovina

MAIN IP LAWS	ENTRY INTO FORCE
<p>1. COPYRIGHT AND RELATED RIGHTS LAW (Official Gazette of BiH, no. 63/10)</p> <p>Related legislation:</p> <ul style="list-style-type: none"> • Regulation on the Conditions for Granting Licenses to Legal Entities for the Collective Management of Copyright and Related Rights • Regulation on the Deposit of Copyright and Related Rights Works and their Registration 	2010
<p>2. LAW ON THE COLLECTIVE MANAGEMENT OF COPYRIGHT AND RELATED RIGHTS IN BIH (Official Gazette of BiH, no. 63/10)</p> <p>Related legislation:</p> <ul style="list-style-type: none"> • Regulation on the Conditions for Granting Licenses to Legal Entities for the Collective Management of Copyright and Related Rights • Regulation on the Mediation for concluding Collective Agreements on the Cable Retransmitted Broadcasting Works 	2010
<p>3. PATENT LAW (Official Gazette of BiH, no. 53/10)</p> <p>Related legislation:</p> <ul style="list-style-type: none"> • Regulations on the Professional Examination for Industrial Property Protection Representatives • Decision on Special Procedural Charges for the Acquisition and Maintenance of Industrial Property Rights • Decision on the Conditions for the Registration of Industrial Property Protection Representatives before the Institute for Intellectual Property of BiH • Regulation on the Procedure for Granting of Patents and Consensual Patents <p>Related treaties:</p> <ul style="list-style-type: none"> • Patent Cooperation Treaty • European Patent Convention (EPO) • Budapest Treaty 	2010

Table continues

Continued

<p>4. LAW ON INDUSTRIAL DESIGNS (Official Gazette of BiH, no. 53/10)</p> <p>Related legislation:</p> <ul style="list-style-type: none">• Regulations on the Professional Examination for Industrial Property Protection Representatives• Decision on Special Procedural Charges for the Acquisition and Maintenance of Industrial Property Rights• Decision on the Conditions for the Registration of Industrial Property Protection Representatives before the Institute for Intellectual Property of BiH• Regulation on the Procedure for the Grant of Industrial Designs <p>Related treaties:</p> <ul style="list-style-type: none">• Paris convention• Hague Agreement• Locarno Agreement	<p>2010</p>
<p>5. TRADEMARK LAW (Official Gazette of BiH, no. 53/10)</p> <p>Related legislation:</p> <ul style="list-style-type: none">• Regulations on the Professional Examination for Industrial Property Protection Representatives• Decision on Special Procedural Charges for the Acquisition and Maintenance of Industrial Property Rights• Decision on the Conditions for the Registration of Industrial Property Protection Representatives before the Institute for Intellectual Property of BiH• Regulation on the Procedure for the Grant of Trademarks <p>Related treaties:</p> <ul style="list-style-type: none">• Paris Convention• Madrid Agreement (Marks)• Nice Agreement• TRIPs	<p>2010</p>
<p>6. LAW ON THE PROTECTION OF INDICATIONS OF GEOGRAPHICAL ORIGIN (Official Gazette of BiH, no. 53/10)</p> <p>Related legislation:</p> <ul style="list-style-type: none">• Regulations on the Professional Examination for Industrial Property Protection Representatives• Decision on Special Procedural Charges for the Acquisition and Maintenance of Industrial Property Rights• Regulation on the Procedure for the Recognition of Designations of Origin, Names of Origin and Geographical Indications of Products• Decision on the Conditions for the Registration of Industrial Property Protection Representatives before the Institute for Intellectual Property of BiH <p>Related treaties:</p> <ul style="list-style-type: none">• Paris Convention• Madrid Agreement (Indications of Source)• Lisbon Agreement	<p>2010</p>

Table continues

Continued

<p>7. THE LAW ON THE PROTECTION OF TOPOGRAPHIES OF INTEGRATED CIRCUITS (Official Gazette of BiH, no. 53/10) Related legislation:</p> <ul style="list-style-type: none"> • Decision on Special Procedural Charges for the Acquisition and Maintenance of Industrial Property Rights • Regulation on the Procedure for the Recognition of Topographies of Integrated Circuits 	<p>2004</p>
<p>8. LAW ON THE PROTECTION OF NEW VARIETES OF PLANTS (Official Gazette of BiH, no. 14/10)</p>	<p>2010</p>
<p>9. LAW ESTABLISHIN INSTITUTE FOR INTELLECTUAL PROPERTY OF BIH (Official Gazette of BiH, no. 43/04) Related legislation:</p> <ul style="list-style-type: none"> • Decision on Constituting the Council for Intellectual Property Protection • Decision on Constituting the Council for the Development of Intellectual Property Users • Decision on Constituting the Copyright and Related Rights Council 	<p>2004</p>
<p>IP RELATED LAWS</p>	
<p>1. CUSTOMS POLICY LAW OF BIH (Official Gazette of BiH, no. 57/04) Related Legislation:</p> <ul style="list-style-type: none"> • Decision on Implementing Regulations of the Law on Customs Policy of BiH 	<p>2004</p>
<p>2. LAW ON ADMINISTRATIVE FEES (Official Gazette of BiH, no. 16/02)</p>	<p>2002</p>
<p>3. LAW AMENDING THE LAW ON ADMINISTRATIVE FEES (Official Gazette of BiH, no. 43/04) Related Legislation: Order on payment for Administrative Fees</p>	<p>2004</p>
<p>4. LAW ON THE POLICY OF FDI OF BIH (Official Gazette of BiH, no. 17/98) Related Legislation:</p> <ul style="list-style-type: none"> • Law on Foreign Investments of FBiH • Law on Foreign Investments of RS 	<p>1998</p>
<p>5. THE LAW ON COMPETITION (Official Gazette of BiH, no. 48/05)</p>	<p>2005</p>

Appendix 2: BiH Membership in International Treaties and Conventions

WIPO ADMINISTRED TREATIES	ENTRY INTO FORCE
1. Washington Treaty on Intellectual Property in Respect of Integrated Circuits	8/3/2007
2. Singapore Treaty on the Law of Trademarks	31/3/2006
3. WIPO Copyright Treaty	25/11/2009
4. WIPO Performances and Phonograms Treaty	25/11/2009
5. Strasbourg Agreement Concerning the International Patent Classification	27/10/2009
6. Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of Their Phonograms	25/5/2009
7. Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations	19/5/2009
8. Budapest Treaty on the International Recognition of the Deposit of Micro – organisms for the Purposes of patent procedure	27/1/2009
9. Protocol relating to the Madrid Agreement Concerning the International Registration of Marks	27/1/2009
10. Hague Agreement Concerning the International Deposit of Industrial Designs	24/12/2008
11. Trademark Law Treaty	22/12/2006
12. Patent Cooperation Treaty	7/9/1996
13. Brussels Convention Relating to the Distribution of Program – Carrying Signals Transmitted by Satellite	6/3/1992
14. Berne Convention for the Protection of Literary and Artistic Works	1/3/1992
15. Convention Establishing the WIPO	1/3/1992
16. Locarno Agreement Establishing an International Classification for Industrial Designs	1/3/1992
17. Madrid Agreement Concerning the International Registration of Marks	1/3/1992
18. Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks	1/3/1992
19. Paris Convention for the Protection of Industrial Property	1/3/1992
IP – RELATED MULTILATERAL TREATIES	
1. Protocol (III) additional to the Geneva Conventions of 12 August 1949, and relating to the adoption of an additional distinctive emblem	14/1/2007
2. Kiev Protocol on Pollutant Release and Transfer Registers to the Convention on Access to Information, Public Participation in Decision – Making and Access to Justice in Environmental Matters	8/10/2009
3. Stockholm Convention on Persistent Organic Pollutants	28/6/2010
4. Convention on the Rights of Persons with Disabilities	11/4/2010
5. Optional Protocol to the Convention on the Rights of Persons with Disabilities	11/4/2010
6. Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes	3/3/2010
7. Cartagena Protocol on Biosafety to the Convention on Biological Diversity	30/12/2009
8. WHO Framework Convention on Tobacco Control	8/10/2009
9. Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict	22/8/2009
10. Convention on the Protection of the Underwater Cultural Heritage	22/7/2009
11. Convention for the Safeguarding of Intangible Cultural Heritage	23/5/2009

Table continues

Continued

12. Convention on the Protection and Promotion of the Diversity of Cultural Expressions 2005	27/4/2009
13. Aarhus Convention on Access to Information, Public Participation in Decision – Making and Access to Justice in Environmental Matters	30/12/2008
14. Kyoto Protocol to the United Nations Framework Convention on Climate Change	15/7/2007
15. International Plant Protection Convention	2/10/2005
16. Convention on Biological Diversity	24/11/2002
17. United Nations Framework Convention on Climate Change	6/12/2000
18. United Nations Convention on the Law of the Sea	16/11/1994
19. Agreement on the Importation of Educational, Scientific and Cultural Materials	6/3/1992
20. Convention and Statute on Freedom of Transit	6/3/1992
21. Convention Concerning the Protection of the World Cultural and Natural Heritage	6/3/1992
22. Convention for the Protection of Cultural Property in the Event of Armed Conflict	6/3/1992
23. Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field	6/3/1992
24. Convention (II) for the Amelioration of the Condition of the Wounded and Sick and Shipwrecked Members of Armed Forces at Sea	6/3/1992
25. Convention (IV) Relative to the Protection of Civilian Persons in Time of War	6/3/1992
26. Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property	6/3/1992
27. Convention Relating to the Status of Stateless Persons	6/3/1992
28. International Convention on the Harmonization of Frontier Controls of Goods	6/3/1992
29. International Covenant on Economic, Social and Cultural Rights	6/3/1992
30. Protocol (I) Additional to the Geneva Convention of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts	6/3/1992
31. Protocol (II) Additional to the Geneva Convention 12 August 1949, and relating to the Protection of Victims of Non – International Armed Conflict	6/3/1992
32. Protocol to the Agreement on the Importation of educational, Scientific or Cultural Materials	6/3/1992
33. Protocol to the Convention for the Protection of Cultural Property in the Event of Armed Conflict	6/3/1992
34. Protocol 1 annexed to the Universal Copyright Convention as signed at Geneva on 6 September 1952 concerning the application of that Convention the works of stateless persons and refugees	6/3/1992
35. Protocol 2 annexed to the Universal Copyright Convention as signed at Geneva on 6 September 1952 concerning the application of that Convention the works of certain international organizations	6/3/1992
36. Protocol 3 annexed to the Universal Copyright Convention as signed at Geneva on 6 September 1952 concerning the effective date of instruments of ratification or acceptance of or accession to that Convention	6/3/1992
37. United Nations Convention on Contracts for the International Sale of Goods	6/3/1992
38. Universal Copyright Convention as revised on 24 July 1971, with Appendix Declaration relating to Article XVII and Resolution concerning Article XI	6/3/1992
39. Universal Copyright Convention of 6 September 1952, with Appendix Declaration relating to Article XVII and Resolution concerning Article XI	6/3/1992

Table continues

Continued

REGIONAL ECONOMIC INTEGRATION TREATIES	
1. Central European free Trade Agreement	22/11/2007
IP – RELEVANT BILATERAL TREATIES	
1. Trade and Economic Cooperation Agreement between Bosnia and Herzegovina and Switzerland	1/1/2006
2. Free Trade Agreement between Albania and Bosnia and Herzegovina	17/12/2004
3. Free trade Agreement between Bosnia and Herzegovina and Turkey	1/7/2003
4. Free Trade Agreement between Bosnia and Herzegovina and European Community	1/7/2008

Appendix 3: Value of the Seized Goods per Product Type

PRODUCT SECTOR	2005/2006		2007/2008	2009/2010
	Quantity	Value (KM*)	Value (KM)	Value (KM)
Foodstuffs, alcoholic and other beverages				
a. foodstuffs	66.696,08 KG	-	214.583,09	69.880
b. animal feed	-		1.138,15	48
c. alcoholic beverages	28.216,093 L	-	196.831,33	53.434
d. other beverages	-	-	1.900	-
Body care items				
a. perfumes and cosmetics	-	69.972,84	683.789,05	8.778
b. other body care items	-	-	-	198.242
Clothing and accessories				
a. clothing	43.202	1.060.113,76	1.230.643,35	657.441
b. accessories	54.506 items	81.567,2	199.454,5	2.489
Shoes				
a. sport shoes	88.896 pairs	1.736.924,63	2.898.411,14	68.284
b. other shoes	-	-		
Personal accessories				
a. sunglasses and other eye glasses			134.823,85	101.842
b. bags, wallets, purses, cigarette cases, etc.			37.019,65	15.380
c. watches			41.141,75	15.531
d. jewelry and other accessories			947.562,58	31.415
Mobile phones including parts and technical accessories:				
a. mobile phones	257 items		618.764,13	32.694
b. mobile parts and technical accessories	44 items			
Electrical/electronic and computer equipment				
a. computers and computer equipment	143 items		30.738,11	21.018
b. technical accessories and parts			202.136,85	-
CD, DVD, cassette, game cartridges				
a. recorded (music, film, software, games)	351 items		52.618,44	150.274
b. unrecorded			-	-
Toys, games, and sporting articles				
a. toys			28.278,90	29.686
b. games			-	-
c. sporting articles			14.000	65.920
Tobacco products				
a. cigarettes	328.928 items		1.334.110,15	128.079
b. other tobacco products	4 KG		500.000	-
b. machine for cigarette production			2.500.000	-
Medical products				
a. medicines and other products			1.081.391,15	49.755
b. medicines for animals			4.000	-

Table continues

Continued

Other				
a. machines and tools			81.612,94	413.458
b. vehicles including accessories and parts	15 items	392.653,13	2.327.951,36	325.714
c. office stationery			66.840	
d. technical equipment			59.286,48	
e. works of art			72.055,62	1.299
f. musical instruments			4.120	
g. furniture			6.574,77	469
h. living animals			68.969,5	44.595
i. plants and seedlings			10.969	3.603
j. leather and leather products			32.694, 85	
k. narcotics			32.000	
l. other		915.251,02	4.310.912,16	72.949
Total	-	4.256.482, 58	17.464.539,79	2.562.288

Note. *KM = Convertible Mark

Appendix 4: Questionnaire²

Section 1: IDENTIFICATION SHEET

1.1. Name of respondent: _____ (optional)

1.2. Gender

1. Male
2. Female

1.3. Age of respondent:

1. Less than 24
2. [25-34]
3. [35-44]
4. [45-54]
5. 55 and above

1.4. Highest educational level achieved:

1. Doctoral degree (PhD)
2. Postgraduate degree (MA/MS)
3. Undergraduate degree (BA/BS)
4. Other

1.5. Type of economic sector:

1. Private sector
2. Public sector

² The questionnaire is taken and developed from an analysis and assessment of public opinion and IPRs studies conducted by the Arab Center for the Rule of Law and Integrity (2009). A number of questions are fully taken from the questionnaire while the others are slightly adapted in order to fit the research subject.

Section 2: LAWS AND REGULATIONS

2.1. To what extent do you consider that IPRs related laws and regulations are respected by people in your country?

1. Strongly disrespected
2. Quite disrespected
3. Somewhat respected
4. Quite respected
5. Strongly respected

2.2. To what extent do you think are people in your country familiar or unfamiliar with IPRs related laws and regulations?

1. Strongly unfamiliar
2. Quite unfamiliar
3. Somewhat familiar
4. Quite familiar
5. Strongly familiar

2.3. To what extent are you familiar or unfamiliar with the effects IPRs protection may have on economic growth?

6. Strongly unfamiliar
7. Quite unfamiliar
8. Somewhat familiar
9. Quite familiar
10. Strongly familiar

2.4. In your opinion, how often are IPR related laws and regulations enforced?

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

2.5. To what extent do you agree or disagree with the following statements?

Use coding system presented in the Card#1 below:

<i>Strongly disagree</i>	<i>1</i>
<i>Disagree</i>	<i>2</i>
<i>Neither agree nor disagree</i>	<i>3</i>
<i>Agree</i>	<i>4</i>
<i>Strongly agree</i>	<i>5</i>

	Statements	Code
2.5.1.	Access to information related to IPR related laws and regulations are easy.	
2.5.2.	Interpretations of IPR related regulations are consistent and predictable.	
2.5.3.	IPRs policy reform is a priority for the national government.	
2.5.4.	The Institute's Legal department employs qualified and specialized staff.	

Using the provided, following cards (Card #2 and #3), please give importance and satisfaction ratings to each of the factors listed in the table below. Please make sure you complete both ratings for each factor, before moving on to the next one (i.e. fill the table row by row).

2.6. To what extent are these factors important for economic growth?

Use the coding system presented in the Card #2 below:

<i>Very low importance</i>	<i>1</i>
<i>Low importance</i>	<i>2</i>
<i>Average importance</i>	<i>3</i>
<i>High importance</i>	<i>4</i>
<i>Very high importance</i>	<i>5</i>

2.7. What is your degree of satisfaction of the current status of these factors in your country?

Use the coding system presented in the Card #3 below:

<i>Very low satisfaction</i>	<i>1</i>
<i>Low satisfaction</i>	<i>2</i>
<i>Average satisfaction</i>	<i>3</i>
<i>High satisfaction</i>	<i>4</i>
<i>Very high satisfaction</i>	<i>5</i>

Factors	2.6. Importance	2.7. Satisfaction
1. Cooperation by central/local government with businesses		
2. Simplicity of business licensing procedures		
3. Transparency of laws and regulations		
4. Enforcement of contractual and property rights		
5. Tax rates, simplicity and coherence of tax regulations		
6. Controlling unofficial payments to public officials		

Section 3: INTELLECTUAL PROPERTY RIGHTS PROTECTION IN BOSNIA AND HERZEGOVINA

3.1. In your opinion, how important is the protection of Intellectual Property Rights for encouraging investment and growth in Bosnia and Herzegovina?

1. Not important at all
2. Low importance
3. Average importance
4. High importance
5. Very high importance

3.2. In your opinion, how often are intellectual property rights protection (e.g. publishing, music, software, trademark, etc.) enforced in the following sectors?

Use the coding system presented in the Card#4 below:

<i>Never</i>	<i>1</i>
<i>Rarely</i>	<i>2</i>
<i>Sometimes</i>	<i>3</i>
<i>Often</i>	<i>4</i>
<i>Always</i>	<i>5</i>

	Factors	Code
3.2.1.	In Bosnia and Herzegovina in general	
3.2.2.	In public entities	
3.2.3.	In entertainment industry	
3.2.4.	In software and IT industry	
3.2.5.	In publishing industry	
3.2.6.	In manufacturing industry	

3.3. To what extent do you think are people in your country familiar or unfamiliar with the concept of IPRs?

1. Completely unfamiliar
2. Quite unfamiliar
3. Neither
4. Quite familiar
5. Strongly familiar

3.4. To what extent are you familiar with the concept of IPRs?

1. Completely unfamiliar
2. Quite unfamiliar
3. Neither
4. Quite familiar
5. Strongly familiar

3.5. To what extent do you agree or disagree with the following statement: The Institute for intellectual property of BiH doesn't dispose of sufficient financial and human resources to successfully execute tasks within its competences.

1. Strongly disagree
2. Disagree
3. Neither agree or disagree
4. Agree
5. Strongly agree

3.6.1. In your opinion, where do you classify the IPR legal framework of Bosnia and Herzegovina compared to ex Yugoslavia/neighboring countries?

3.6.2. In your opinion, where do you classify the IPR legal framework of Bosnia and Herzegovina compared to industrialized countries?

Use the coding system presented in the Card#5 below:

<i>Near the bottom</i>	<i>1</i>
<i>Below average</i>	<i>2</i>
<i>Average</i>	<i>3</i>
<i>Above average</i>	<i>4</i>
<i>Near the top</i>	<i>5</i>

	Factors	Code
3.6.1.	IPRs legal framework of Bosnia and Herzegovina compared to ex Yugoslavia/neighboring countries	
3.6.2.	IPRs legal framework of Bosnia and Herzegovina compared to industrialized countries	

3.7. In your opinion, how effective are current government policies in enforcing IPRs protection and anti – piracy efforts?

	Factors	Code
3.7.1.	Literary and artistic property rights	
3.7.2.	Industrial property rights	

Use the coding system presented in the Card#6 below:

<i>Very low effectiveness</i>	<i>1</i>
<i>Low effectiveness</i>	<i>2</i>
<i>Average effectiveness</i>	<i>3</i>
<i>High effectiveness</i>	<i>4</i>
<i>Very high effectiveness</i>	<i>5</i>

3.8. Please rate your degree of satisfaction regarding the following factors pertaining to the Institute for Intellectual Property of Bosnia and Herzegovina.

Use the coding system presented in the Card#3 below:

<i>Very low satisfaction</i>	<i>1</i>
<i>Low satisfaction</i>	<i>2</i>
<i>Average satisfaction</i>	<i>3</i>
<i>High satisfaction</i>	<i>4</i>
<i>Very high satisfaction</i>	<i>5</i>

	Factors pertaining to the Institute	Code
3.8.1.	General Performance	
3.8.2.	Independence from political interventions	
3.8.3.	Technical competence	
3.8.4.	Speed of reaching decisions	
3.8.5.	Clarity and transparency of procedures	

Using the provided cards (Card #6 and #3), please give effectiveness and satisfaction ratings to each of the factors listed in the table below. Please make sure you complete both ratings for each factor, before moving on to the next one (i.e. fill the table row by row).

3.9. To what extent are the factors below effective in promoting IPRs enforcement?

Use the coding system presented in the Card #6 below:

<i>Very low effectiveness</i>	<i>1</i>
<i>Low effectiveness</i>	<i>2</i>
<i>Average effectiveness</i>	<i>3</i>
<i>High effectiveness</i>	<i>4</i>
<i>Very high effectiveness</i>	<i>5</i>

3.10. What is your current degree of satisfaction with each of these factors?

Use the coding system presented in the Card #3 below:

<i>Very low satisfaction</i>	<i>1</i>
<i>Low satisfaction</i>	<i>2</i>
<i>Average satisfaction</i>	<i>3</i>
<i>High satisfaction</i>	<i>4</i>
<i>Very high satisfaction</i>	<i>5</i>

Factors pertaining to IPRs enforcement policy	3.9.Effectiveness	3.10.Satisfaction
1. Clarity and transparency of procedures		
2 Speed of reaching decisions and verdicts		
3 General political willingness to support		
4 Presence of specialized court staff and judges and alternative dispute mechanisms.		
5 Promotion of public awareness		
6 Coordination between IPR office and other public institutions		
7 Registration fees level		
8 Complementary laws (e.g. consumer's protection law)		

3.11. Please give a priority rating to the following IPR enforcement measures?
Use the coding system presented in the Card #7 below:

<i>Very low priority</i>	<i>1</i>
<i>Low priority</i>	<i>2</i>
<i>Average priority</i>	<i>3</i>
<i>High priority</i>	<i>4</i>
<i>Very high priority</i>	<i>5</i>

	Measures	Code
3.11.1.	Update and adapt IPR laws and regulations	
3.11.2.	Strengthen anti – smuggling measures	
3.11.3.	Increase the frequency of raids	
3.11.4.	Organize targeted awareness campaigns	
3.11.5.	Impose fines on infringers	
3.11.6.	Impose jail sentences on infringers	
3.11.7.	Introduce positive incentives (e.g. reduced software prices for SMEs)	
3.11.8.	Joining the international agreements of IPR protection	

3.12.1. To what extent is joining the World Trade Organization important for economic growth in Bosnia and Herzegovina?

3.12.2. To what extent is joining the World Trade Organization important for IPRs protection policy?

Use the coding system presented in the Card #2 below:

<i>Very low importance</i>	<i>1</i>
<i>Low importance</i>	<i>2</i>
<i>Average importance</i>	<i>3</i>
<i>High importance</i>	<i>4</i>
<i>Very high importance</i>	<i>5</i>

3.13. In your opinion, IPR protection bilateral and/or multilateral agreements result in a net advantage for:

1. Counterpart(s) only
2. All parties equally
3. Bosnia and Herzegovina

3.13. In your opinion, what is the level of economic losses resulting from the infringement of the IPR in Bosnia and Herzegovina?

Use the coding system presented in the Card #8 below:

<i>No losses</i>	<i>1</i>
<i>Minimum losses</i>	<i>2</i>
<i>Average losses</i>	<i>3</i>
<i>High losses</i>	<i>4</i>
<i>Very high losses</i>	<i>5</i>

Section 4: GENERAL COMMENTS

Please use this section to note any comments or suggestions provided by the respondent during the interview. Whenever the comment is in reference to a specific question, please indicate the number of that question.

Appendix 5: Questionnaire with Results

Section 1: Profile of Respondents

Q1_2 Gender				
	Total	Private sector	Public sector	% Total
No answers	0			0,00%
Male	103	76	27	61,68%
Female	64	40	24	38,32%
Total answers	167	116	51	100,00%

Q1_3 Age of respondent				
	Total	Private sector	Public sector	%Total
No answers	0			0,00%
Less than 24	12	10	2	7,19%
[25 - 34]	68	64	4	40,72%
[35 - 44]	45	27	18	26,95%
[45 - 54]	33	12	21	19,76%
55 and above	9	3	6	5,39%
Total answers	167	116	51	100,00%

Q1_4 Highest educational level achieved				
	Total	Private sector	Public sector	%Total
No answers	0			0,00%
Doctoral degree (PhD)	19	7	12	11,38%
Master's degree	45	27	18	26,95%
Undergraduate degree (BA/BS)	91	74	17	54,49%
Other	12	8	4	7,19%
Total answers	167	116	51	100,00%

Q1_5 Type of economic sector		
	Total	%Total
No answers	0	0,00%
Private sector	116	69,46%
Public sector	51	30,54%
Total answers	167	100,00%

Section 2: Laws and Regulations

Q2_1 To what extent do you consider that IPRs related laws and regulations are respected by people in your country?				
	Total	Private sector	Public sector	% Total
No answers	0			
Strongly disrespected	21	15	6	12,57%
Quite disrespected	46	32	14	27,54%
Somewhat respected	77	54	23	46,11%
Quite respected	18	11	7	10,78%
Strongly respected	5	4	1	2,99%
Total answers	167	116	51	100,00%

Q2_2 To what extent do you think are people in your country familiar or unfamiliar with IPRs related laws and regulations?				
	Total	Private sector	Public sector	% Total
No answers	0			
Strongly unfamiliar	19	15	4	11,38%
Quite unfamiliar	98	63	35	58,68%
Somewhat familiar	35	29	6	20,96%
Quite familiar	15	9	6	8,98%
Strongly familiar	0	0	0	0,00%
Total answers	167	116	51	100,00%

Q2_3 To what extent are you familiar or unfamiliar with the effects IPRs protection may have on economic growth and development?				
	Total	Private sector	Public sector	% Total
No answers	12			
Strongly unfamiliar	13	8	5	8,39%
Quite unfamiliar	42	13	4	10,97%
Somewhat familiar	23	45	23	43,87%
Quite familiar	68	36	12	30,97%
Strongly familiar	9	7	2	5,81%
Total answers	155	109	46	100,00%

Q2_4 In your opinion, how often are IPRs related laws and regulations enforced?				
	Total	Private sector	Public sector	% Total
No answers	9			
Never	7	4	3	4,43%
Rarely	34	36	12	30,38%
Sometimes	65	43	22	41,14%
Often	48	26	8	21,52%
Always	4	4	0	2,53%
Total answers	158	113	45	100,00%

Q2_5_1 To what extent do you agree or disagree with the following statements? Access to information related to IPRs related laws and regulations is easy.				
	Total	Private sector	Public sector	% Total
No answers	8			
Strongly disagree	9	8	1	5,66%
Disagree	28	9	6	9,43%
Neither agree nor disagree	32	32	9	25,79%
Agree	63	56	23	49,69%
Strongly agree	27	6	9	9,43%
Total answers	159	111	48	100,00%

Q2_5_2 To what extent do you agree or disagree with the following statements? Interpretations of IPRs related regulations are consistent and predictable.				
	Total	Private sector	Public sector	% Total
No answers	17			
Strongly disagree	13	9	4	8,67%
Disagree	42	36	6	28,00%
Neither agree nor disagree	59	40	19	39,33%
Agree	32	23	9	21,33%
Strongly agree	4	1	3	2,67%
Total answers	150	109	41	100,00%

Q2_5_3 To what extent do you agree or disagree with the following statements? IPRs related law reform is a priority for the national government.				
	Total	Private sector	Public sector	% Total
No answers	6			
Strongly disagree	67	46	21	41,61%
Disagree	58	43	15	36,02%
Neither agree nor disagree	23	14	9	14,29%
Agree	9	7	2	5,59%
Strongly agree	4	1	3	2,48%
Total answers	161	111	50	100,00%

Q2_5_4 To what extent do you agree or disagree with the following statements? The Institute's Legal department employs qualified and specialized staff.				
	Total	Private sector	Public sector	% Total
No answers	12			
Strongly disagree	28	19	9	18,06%
Disagree	65	48	17	41,94%
Neither agree nor disagree	48	36	12	30,97%
Agree	9	4	5	5,81%
Strongly agree	5	2	3	3,23%
Total answers	155	109	46	100,00%

Q2_6_1 To what extent are these factors important for economic growth: Cooperation by central/local government with businesses.				
	Total	Private sector	Public sector	% Total
No answers	9			
Very low importance	3	2	1	1,90%
Low importance	12	9	3	7,59%
Average importance	21	11	10	13,29%
High importance	83	61	22	52,53%
Very high importance	39	29	10	24,68%
Total answers	158	112	46	100,00%

Q2_6_2 To what extent are these factors important for economic growth: Simplicity of business licensing procedures.				
	Total	Private sector	Public sector	% Total
No answers	4			
Very low importance	2	2	0	1,23%
Low importance	10	8	2	6,13%
Average importance	19	13	6	11,66%
High importance	64	45	19	39,26%
Very high importance	68	45	23	41,72%
Total answers	163	113	50	100,00%

Q2_6_3 To what extent are these factors important for economic growth: Tax rates, simplicity and coherence of tax regulations.				
	Total	Private sector	Public sector	% Total
No answers	4			
Very low importance	3	3	0	1,84%
Low importance	7	7	0	4,29%
Average importance	21	18	3	12,88%
High importance	56	35	21	34,36%
Very high importance	76	50	26	46,63%
Total answers	163	113	50	100,00%

Q2_6_4 To what extent are these factors important for economic growth: Enforcement of contractual and property rights.				
	Total	Private sector	Public sector	% Total
No answers	3			
Very low importance	2	2	0	1,22%
Low importance	5	4	1	3,05%
Average importance	18	12	6	10,98%
High importance	45	36	9	27,44%
Very high importance	94	62	32	57,32%
Total answers	164	116	48	100,00%

Q2_6_5 To what extent are these factors important for economic growth: Transparency of laws and regulations.				
	Total	Private sector	Public sector	% Total
No answers	9			
Very low importance	6	2	4	3,80%
Low importance	12	5	7	7,59%
Average importance	25	17	8	15,82%
High importance	37	28	9	23,42%
Very high importance	78	57	21	49,37%
Total answers	158	109	49	100,00%

Q2_6_6 To what extent are these factors important for economic growth: Controlling unofficial payments to public officials.				
	Total	Private sector	Public sector	% Total
No answers	3			
Very low importance	1	1	0	0,61%
Low importance	4	3	1	2,44%
Average importance	13	8	5	7,93%
High importance	41	31	10	25,00%
Very high importance	105	73	32	64,02%
Total answers	164	116	48	100,00%

Q2_7_1 What is your degree of satisfaction of the status of current these factors in your country: Cooperation by central/local government with businesses.				
	Total	Private sector	Public sector	% Total
No answers	13			
Very low satisfaction	19	12	7	12,34%
Low satisfaction	82	64	18	53,25%
Average satisfaction	49	30	19	31,82%
High satisfaction	3	1	2	1,95%
Very high satisfaction	1	0	1	0,65%
Total answers	154	107	47	100,00%

Q2_7_2 What is your degree of satisfaction of the status of current these factors in your country: Simplicity of business licensing procedures.				
	Total	Private sector	Public sector	% Total
No answers	10			
Very low satisfaction	32	26	6	20,38%
Low satisfaction	75	49	26	47,77%
Average satisfaction	49	37	12	31,21%
High satisfaction	1	0	1	0,64%
Very high satisfaction	0	0	0	0,00%
Total answers	157	112	45	100,00%

Q2_7_3 What is your degree of satisfaction of the status of current these factors in your country: Transparency of laws and regulations.				
	Total	Private sector	Public sector	% Total
No answers	9			
Very low satisfaction	39	32	7	24,68%
Low satisfaction	53	36	17	33,54%
Average satisfaction	64	39	25	40,51%
High satisfaction	2	0	2	1,27%
Very high satisfaction	0	0	0	0,00%
Total answers	158	107	51	100,00%

Q2_7_4 What is your degree of satisfaction of the status of current these factors in your country: Enforcement of contractual and property rights.				
	Total	Private sector	Public sector	% Total
No answers	6			
Very low satisfaction	39	29	10	24,22%
Low satisfaction	68	52	16	42,24%
Average satisfaction	43	33	10	26,71%
High satisfaction	7	2	5	4,35%
Very high satisfaction	4	0	4	2,48%
Total answers	161	116	45	100,00%

Q2_7_5 What is your degree of satisfaction of the status of current these factors in your country: Tax rates, simplicity and coherence of tax regulations.				
	Total	Private sector	Public sector	% Total
No answers	5			
Very low satisfaction	53	37	16	32,72%
Low satisfaction	57	39	18	35,19%
Average satisfaction	45	39	6	27,78%
High satisfaction	4	0	4	2,47%
Very high satisfaction	3	1	2	1,85%
Total answers	162	116	46	100,00%

Q2_7_6 What is your degree of satisfaction of the status of current these factors in your country: Controlling unofficial payments to public officials.				
	Total	Private sector	Public sector	% Total
No answers	3			
Very low satisfaction	123	106	17	75,00%
Low satisfaction	21	9	12	12,80%
Average satisfaction	16	1	15	9,76%
High satisfaction	3	0	3	1,83%
Very high satisfaction	1	0	1	0,61%
Total answers	164	116	48	100,00%

Section 3: Intellectual Property Rights Protection in Bosnia and Herzegovina

Q3_1 In your opinion, how important is the protection of intellectual property rights for encouraging investment and growth in Bosnia and Herzegovina?				
	Total	Private sector	Public sector	% Total
No answers	0			
Very low importance	2	1	1	1,20%
Low importance	5	4	1	2,99%
Average importance	38	27	11	22,75%
High importance	43	28	15	25,75%
Very high importance	79	56	23	47,31%
Total answers	167	116	51	100,00%

Q3_2_1 In your opinion, how often are intellectual property rights (e.g. publishing, music, software, trademark, etc.) enforced in the following sectors: In Bosnia and Herzegovina in general.				
	Total	Private sector	Public sector	% Total
No answers	0			
Never	21	16	5	12,57%
Rarely	57	46	11	34,13%
Sometimes	73	49	24	43,71%
Often	16	5	11	9,58%
Always	0	0	0	0,00%
Total answers	167	116	51	100,00%

Q3_2_2 In your opinion, how often are intellectual property rights (e.g. publishing, music, software, trademark, etc.) enforced in the following sectors: In public entities.				
	Total	Private sector	Public sector	% Total
No answers	12			
Never	14	12	2	9,03%
Rarely	43	37	6	27,74%
Sometimes	56	42	14	36,13%
Often	36	16	20	23,23%
Always	6	2	4	3,87%
Total answers	155	109	46	100,00%

Q3_2_3 In your opinion, how often are intellectual property rights (e.g. publishing, music, software, trademark, etc.) enforced in the following sectors: In entertainment industry.				
	Total	Private sector	Public sector	% Total
No answers	9			
Never	58	42	16	36,71%
Rarely	73	56	17	46,20%
Sometimes	19	13	6	12,03%
Often	7	3	4	4,43%
Always	1	0	1	0,63%
Total answers	158	114	44	100,00%

Q3_2_4 In your opinion, how often are intellectual property rights (e.g. publishing, music, software, trademark, etc.) enforced in the following sectors: In software and IT industry.				
	Total	Private sector	Public sector	% Total
No answers	5			
Never	59	36	23	36,42%
Rarely	75	58	17	46,30%
Sometimes	25	19	6	15,43%
Often	3	1	2	1,85%
Always	0	0	0	0,00%
Total answers	162	114	48	100,00%

Q3_2_5 In your opinion, how often are intellectual property rights (e.g. publishing, music, software, trademark, etc.) enforced in the following sectors: In publishing industry.				
	Total	Private sector	Public sector	% Total
No answers	7			
Never	23	19	4	14,38%
Rarely	56	37	19	35,00%
Sometimes	67	53	14	41,88%
Often	14	3	11	8,75%
Always	0	0	0	0,00%
Total answers	160	112	48	100,00%

Q3_2_6 In your opinion, how often are intellectual property rights (e.g. publishing, music, software, trademark, etc.) enforced in the following sectors: In manufacturing industry.				
	Total	Private sector	Public sector	% Total
No answers	25			
Never	12	10	2	8,45%
Rarely	35	29	6	24,65%
Sometimes	62	49	13	43,66%
Often	31	20	11	21,83%
Always	2	0	2	1,41%
Total answers	142	108	34	100,00%

Q3_3 To what extent do you think are people in your country familiar or unfamiliar with the concept of IPRs?				
	Total	Private sector	Public sector	% Total
No answers	0			
Strongly unfamiliar	23	16	7	13,77%
Quite unfamiliar	112	78	34	67,07%
Somewhat familiar	29	20	9	17,37%
Quite familiar	3	2	1	1,80%
Strongly familiar	0	0	0	0,00%
Total answers	167	116	51	100,00%

Q3_4 To what extent do you think are people in your country familiar or unfamiliar with the concept of IPRs?				
	Total	Private sector	Public sector	% Total
No answers	3			
Strongly unfamiliar	2	2	0	1,22%
Quite unfamiliar	23	19	4	14,02%
Somewhat familiar	45	39	6	27,44%
Quite familiar	56	32	24	34,15%
Strongly familiar	35	22	16	21,34%
Total answers	164	114	50	100,00%

Q3_5 To what extent do you agree or disagree with the following statement: Institute for intellectual property of BiH doesn't dispose of sufficient financial and human resources to successfully execute tasks within its competences.				
	Total	Private sector	Public sector	% Total
No answers	9			
Strongly disagree	7	4	1	3,16%
Disagree	14	10	4	8,86%
Neither agree nor disagree	42	27	10	23,42%
Agree	68	53	22	47,47%
Strongly agree	27	18	9	17,09%
No answers	158	112	46	100,00%

Q3_6_1 In your opinion, where do you classify the IPR legal framework of Bosnia and Herzegovina compared to former Yugoslavia/ neighboring countries?				
	Total	Private sector	Public sector	% Total
No answers	16			
Near the bottom	36	29	7	23,84%
Below average	49	36	13	32,45%
Average	64	43	21	42,38%
Above average	2	0	2	1,32%
Near the top	0	0	0	0,00%
Total answers	151	108	43	100,00%

Q3_6_2 In your opinion, where do you classify the IPR legal framework of? Bosnia and Herzegovina compared to industrialized countries.				
	Total	Private sector	Public sector	% Total
No answers	23			
Near the bottom	27	24	3	18,75%
Below average	64	47	17	44,44%
Average	50	27	23	34,72%
Above average	3	0	3	2,08%
Near the top	0	0	0	0,00%
Total answers	144	98	46	100,00%

Q3_7_1 In your opinion how effective are current government policies in enforcing IPR protection and anti – piracy efforts? Literary and artistic property rights.				
	Total	Private sector	Public sector	% Total
No answers	18			
Very low effectiveness	29	25	4	19,46%
Low effectiveness	68	52	16	45,64%
Average effectiveness	48	24	24	32,21%
High effectiveness	4	1	3	2,68%
Very high effectiveness	0	0	0	0,00%
Total answers	149	102	47	100,00%

Q3_7_2 In your opinion how effective are current government policies in enforcing IPR protection and anti – piracy efforts? Industrial property rights.				
	Total	Private sector	Public sector	% Total
No answers	18			
Very low effectiveness	23	18	5	15,44%
Low effectiveness	42	38	4	28,19%
Average effectiveness	77	48	29	51,68%
High effectiveness	7	2	5	4,70%
Very high effectiveness	0	0	0	0,00%
Total answers	149	106	43	100,00%

Q3_8_1 Please rate your degree of satisfaction regarding the following factors pertaining to the Institute for Intellectual Property of Bosnia and Herzegovina: General performance.				
	Total	Private sector	Public sector	% Total
No answers	48			
Very low satisfaction	19	13	6	15,97%
Low satisfaction	36	29	7	30,25%
Average satisfaction	58	33	25	48,74%
High satisfaction	4	1	3	3,36%
Very high satisfaction	2	0	2	1,68%
Total answers	119	76	43	100,00%

Q3_8_2 Please rate your degree of satisfaction regarding the following factors pertaining to Institute for intellectual property of Bosnia and Herzegovina: Independence from political interventions.				
	Total	Private sector	Public sector	% Total
No answers	36			
Very low satisfaction	56	51	5	42,75%
Low satisfaction	41	37	4	31,30%
Average satisfaction	33	10	23	25,19%
High satisfaction	1	0	1	0,76%
Very high satisfaction	0	0	0	0,00%
Total answers	131	98	33	100,00%

Q3_8_3 Please rate your degree of satisfaction regarding the following factors pertaining to Institute for intellectual property of Bosnia and Herzegovina: Technical competence.				
	Total	Private sector	Public sector	% Total
No answers	61			
Very low satisfaction	16	15	1	15,09%
Low satisfaction	34	31	3	32,08%
Average satisfaction	39	33	6	36,79%
High satisfaction	13	4	9	12,26%
Very high satisfaction	4	1	3	3,77%
Total answers	106	84	22	100,00%

Q3_8_4 Please rate your degree of satisfaction regarding the following factors pertaining to Institute for intellectual property of Bosnia and Herzegovina: Speed of reaching decisions.				
	Total	Private sector	Public sector	% Total
No answers	43			
Very low satisfaction	29	26	3	23,39%
Low satisfaction	51	44	7	41,13%
Average satisfaction	37	14	23	29,84%
High satisfaction	2	1	1	1,61%
Very high satisfaction	5	0	5	4,03%
Total answers	124	85	39	100,00%

Q3_8_5 Please rate your degree of satisfaction regarding the following factors pertaining to Institute for intellectual property of Bosnia and Herzegovina: Clarity and transparency of procedures.				
	Total	Private sector	Public sector	% Total
No answers	41			
Very low satisfaction	10	8	2	7,94%
Low satisfaction	16	13	3	12,70%
Average satisfaction	39	35	4	30,95%
High satisfaction	42	19	23	33,33%
Very high satisfaction	19	10	9	15,08%
Total answers	126	85	41	100,00%

Q3_9_1 To what extent are the factors below effective in promoting enforcement of IPRs: Clarity and transparency of procedures.				
	Total	Private sector	Public sector	% Total
No answers	12			
Very low effectiveness	14	12	2	9,03%
Low effectiveness	22	19	3	14,19%
Average effectiveness	40	36	4	25,81%
High effectiveness	53	32	21	34,19%
Very high effectiveness	26	7	19	16,77%
Total answers	155	106	49	100,00%

Q3_9_2 To what extent are the factors below effective in promoting enforcement of IPRs: Speed of reaching decisions and verdicts.				
	Total	Private sector	Public sector	% Total
No answers	16			
Very low effectiveness	6	3	3	3,97%
Low effectiveness	12	8	4	7,95%
Average effectiveness	36	27	9	23,84%
High effectiveness	35	29	6	23,18%
Very high effectiveness	62	42	20	41,06%
Total answers	151	109	42	100,00%

Q3_9_3 To what extent are the factors below effective in promoting enforcement of IPRs: General political willingness to support.				
	Total	Private sector	Public sector	% Total
No answers	8			
Very low effectiveness	2	2	0	1,26%
Low effectiveness	5	4	1	3,14%
Average effectiveness	37	29	8	23,27%
High effectiveness	42	31	11	26,42%
Very high effectiveness	73	46	27	45,91%
Total answers	159	112	47	100,00%

Q3_9_4 To what extent are the factors below effective in promoting enforcement of IPRs: Presence of specialized court staff and judges and alternative dispute mechanisms.				
	Total	Private sector	Public sector	% Total
No answers	13			
Very low effectiveness	7	6	1	4,55%
Low effectiveness	13	9	4	8,44%
Average effectiveness	47	32	15	30,52%
High effectiveness	36	28	8	23,38%
Very high effectiveness	51	34	17	33,12%
Total answers	154	109	45	100,00%

Q3_9_5 To what extent are the factors below effective in promoting enforcement of IPRs: Promotion of public awareness.				
	Total	Private sector	Public sector	% Total
No answers	9			
Very low effectiveness	19	17	2	12,03%
Low effectiveness	24	18	6	15,19%
Average effectiveness	37	29	8	23,42%
High effectiveness	43	20	23	27,22%
Very high effectiveness	35	26	9	22,15%
Total answers	158	110	48	100,00%

Q3_9_6 To what extent are the factors below effective in promoting enforcement of IPRs:: Coordination between Institute for intellectual property and other public institutions.				
	Total	Private sector	Public sector	% Total
No answers	16			
Very low effectiveness	18	12	6	11,92%
Low effectiveness	37	29	8	24,50%
Average effectiveness	35	26	9	23,18%
High effectiveness	37	20	17	24,50%
Very high effectiveness	24	17	7	15,89%
Total answers	151	104	47	100,00%

Q3_10_1 What is your current degree of satisfaction with each of these factors? Clarity and transparency of procedures.				
	Total	Private sector	Public sector	% Total
No answers	14			
Very low satisfaction	33	30	3	21,57%
Low satisfaction	62	49	13	40,52%
Average satisfaction	47	28	19	30,72%
High satisfaction	8	5	3	5,23%
Very high satisfaction	3	0	3	1,96%
Total answers	153	112	41	100,00%

Q3_10_2 What is your current degree of satisfaction with each of these factors? Speed of reaching decisions and verdicts.				
	Total	Private sector	Public sector	% Total
No answers	12			
Very low satisfaction	43	39	4	27,74%
Low satisfaction	75	58	17	48,39%
Average satisfaction	29	12	17	18,71%
High satisfaction	7	2	5	4,52%
Very high satisfaction	1	0	1	0,65%
Total answers	155	111	44	100,00%

Q3_10_3 What is your current degree of satisfaction with each of these factors? General political willingness to support.				
	Total	Private sector	Public sector	% Total
No answers	8			
Very low satisfaction	68	49	19	42,77%
Low satisfaction	65	51	14	40,88%
Average satisfaction	22	12	10	13,84%
High satisfaction	4	1	3	2,52%
Very high satisfaction	0	0	0	0,00%
Total answers	159	113	46	100,00%

Q3_10_4 What is your current degree of satisfaction with each of these factors? Presence of specialized court staff and judges and alternative dispute mechanisms.				
	Total	Private sector	Public sector	% Total
No answers	15			
Very low satisfaction	39	31	8	25,66%
Low satisfaction	54	41	13	35,53%
Average satisfaction	47	36	11	30,92%
High satisfaction	9	3	6	5,92%
Very high satisfaction	3	0	3	1,97%
Total answers	152	111	41	100,00%

Q3_10_5 What is your current degree of satisfaction with each of these factors? Promotion of public awareness.				
	Total	Private sector	Public sector	% Total
No answers	16			
Very low satisfaction	46	35	11	30,46%
Low satisfaction	61	43	18	40,40%
Average satisfaction	29	19	10	19,21%
High satisfaction	8	3	5	5,30%
Very high satisfaction	7	3	4	4,64%
Total answers	151	103	48	100,00%

Q3_10_6 What is your current degree of satisfaction with each of these factors? Coordination between Institute for intellectual property and other public institutions.				
	Total	Private sector	Public sector	% Total
No answers	26			
Very low satisfaction	38	32	6	26,95%
Low satisfaction	63	47	16	44,68%
Average satisfaction	27	21	6	19,15%
High satisfaction	10	6	4	7,09%
Very high satisfaction	3	0	3	2,13%
Total answers	141	106	35	100,00%

Q3_10_7 What is your current degree of satisfaction with each of these factors? Registration fees level.				
	Total	Private sector	Public sector	% Total
No answers	21			
Very low satisfaction	27	21	6	18,49%
Low satisfaction	43	35	8	29,45%
Average satisfaction	65	46	19	44,52%
High satisfaction	9	5	4	6,16%
Very high satisfaction	2	0	2	1,37%
Total answers	146	107	39	100,00%

Q3_10_8 What is your current degree of satisfaction with each of these factors? Complementary laws (e.g. consumer's protection law).				
	Total	Private sector	Public sector	% Total
No answers	21			
Very low satisfaction	21	17	4	14,38%
Low satisfaction	48	38	10	32,88%
Average satisfaction	59	44	15	40,41%
High satisfaction	13	7	6	8,90%
Very high satisfaction	5	1	4	3,42%
Total answers	146	107	39	100,00%

Q3_11_1 Please give a priority rating to the following IPR enforcement measures: Update and adapt IPR laws and regulations.				
	Total	Private sector	Public sector	% Total
No answers	8			
Very low priority	9	6	3	5,66%
Low priority	12	8	4	7,55%
Average priority	37	29	8	23,27%
High priority	56	37	19	35,22%
Very high priority	45	33	12	28,30%
Total answers	159	113	46	100,00%

Q3_11_2 Please give a priority rating to the following IPR enforcement measures: Strengthen anti – smuggling measures.				
	Total	Private sector	Public sector	% Total
No answers	5			
Very low priority	1	1	0	0,62%
Low priority	7	4	3	4,32%
Average priority	29	19	10	17,90%
High priority	52	41	11	32,10%
Very high priority	73	50	23	45,06%
Total answers	162	115	47	100,00%

Q3_11_3 Please give a priority rating to the following IPR enforcement measures: Increase the frequency of raids.				
	Total	Private sector	Public sector	% Total
No answers	5			
Very low priority	8	6	2	4,94%
Low priority	15	9	6	9,26%
Average priority	34	26	8	20,99%
High priority	51	37	14	31,48%
Very high priority	54	37	17	33,33%
Total answers	162	115	47	100,00%

Q3_11_4 Please give a priority rating to the following IPR enforcement measures: Organize targeted awareness campaigns.				
	Total	Private sector	Public sector	% Total
No answers	6			
Very low priority	5	4	1	3,11%
Low priority	13	9	4	8,07%
Average priority	58	37	21	36,02%
High priority	49	35	14	30,43%
Very high priority	36	28	8	22,36%
Total answers	161	113	48	100,00%

Q3_11_5 Please give a priority rating to the following IPR enforcement measures: Impose fines on infringers.				
	Total	Private sector	Public sector	% Total
No answers	5			
Very low priority	2	2	0	1,23%
Low priority	12	8	4	7,41%
Average priority	26	19	7	16,05%
High priority	43	33	10	26,54%
Very high priority	79	52	27	48,77%
Total answers	162	114	48	100,00%

Q3_11_6 Please give a priority rating to the following IPR enforcement measures: Impose jail sentences on infringers.				
	Total	Private sector	Public sector	% Total
No answers	5			
Very low priority	13	8	5	8,02%
Low priority	16	12	4	9,88%
Average priority	28	19	9	17,28%
High priority	42	31	11	25,93%
Very high priority	63	44	19	38,89%
Total answers	162	114	48	100,00%

Q3_11_7 Please give a priority rating to the following IPR enforcement measures: Introduce positive incentives (e.g. reduced software prices for SMEs).				
	Total	Private sector	Public sector	% Total
No answers	5			
Very low priority	3	3	0	1,85%
Low priority	9	6	3	5,56%
Average priority	26	18	8	16,05%
High priority	49	36	13	30,25%
Very high priority	75	51	24	46,30%
Total answers	162	114	48	100,00%

Q3_11_8 Please give a priority rating to the following IPR enforcement measures: Joining the international agreements of IPR protection.				
	Total	Private sector	Public sector	% Total
No answers	7			
Very low priority	4	3	1	2,52%
Low priority	12	8	4	7,55%
Average priority	62	35	27	38,99%
High priority	50	40	10	31,45%
Very high priority	31	26	5	19,50%
Total answers	159	112	47	100,00%

Q3_12_1 To what extent is joining the World Trade Organization important for economic growth and development in Bosnia and Herzegovina?				
	Total	Private sector	Public sector	% Total
No answers	11			
Very low importance	8	6	2	5,13%
Low importance	15	12	3	9,62%
Average importance	29	20	9	18,59%
High importance	56	39	17	35,90%
Very high importance	48	36	12	30,77%
Total answers	156	113	43	100,00%

Q3_12_2 To what extent are IPR protection and anti – piracy efforts an important factor for joining the World Trade Organization?				
	Total	Private sector	Public sector	% Total
No answers	4			
Very low importance	2	2	0	1,23%
Low importance	8	6	2	4,91%
Average importance	34	26	8	20,86%
High importance	43	26	17	26,38%
Very high importance	76	54	22	46,63%
Total answers	163	114	49	100,00%

Q3_13 In your opinion, IPR protection bilateral and/or multilateral agreements result in a net advantage for:				
	Total	Private sector	Public sector	% Total
No answers	7			
Counterpart(s) only	22	16	6	13,84%
All parties equally	123	85	38	77,36%
Bosnia and Herzegovina	14	11	3	8,81%
Total answers	159	112	47	100,00%

Q3_14 In your opinion, what is the level of economic losses resulting from the infringement of the IPR in Bosnia and Herzegovina?				
	Total	Private sector	Public sector	% Total
No answers	4			
No losses	0	0	0	0,00%
Minimum losses	2	0	2	1,23%
Average losses	32	26	6	19,63%
High losses	78	46	32	47,85%
Very high losses	51	41	10	31,29%
Total answers	163	113	50	100,00%