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Investigation of Intellectual Property Rights and Its Effects and Advantages in Economic Development

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ABSTRACT: This study investigates the effects and advantages of intellectual property rights (IPRs) on economic development. In today's knowledge-driven economy, IPRs play a crucial role in protecting innovations and encouraging research and development. While IPRs can initially limit local companies' ability to imitate foreign technologies, they also attract foreign investment, stimulate technology transfer, and promote domestic innovation. For instance, strong IPR protections have led to increased R&D spending by multinational corporations in many countries, resulting in job creation and economic growth. Additionally, IPRs can incentivize local inventors and entrepreneurs to develop new products and services, contributing to a more diversified and competitive economy.

KEYWORDS: rights, intellectual property rights, economic development**.**

I. INTRODUCTION

Intellectual property rights (IPRs), broadly defined, encompass the legal protections afforded to intellectual creations and innovations in scientific, industrial, literary, and artistic fields. These rights empower their owners to benefit from the fruits of human ingenuity, bestowing upon them economic value and the capacity for commercial exchange. Unlike tangible assets, IPRs exist in the intangible realm, representing the intellectual and creative endeavours of individuals or organizations.

A primary objective of intellectual property owners, particularly private institutions, is to maximize economic and commercial returns through the sale or transfer of their IPRs. This process, commonly referred to as commercialization, can take various forms, including product manufacturing and sales, collaborative ventures, licensing arrangements, and the outright sale or transfer of intellectual assets. Ultimately, the goal of commercialization is to transform an innovation into a marketable commodity capable of generating revenue and profit.

The realization of economic and commercial benefits by intellectual property owners' hinges on a confluence of factors. At the micro level, individual effort and skill play a pivotal role. However, the existence of a supportive macro environment that safeguards intellectual property rights is equally indispensable. Without robust IPR protection and effective enforcement mechanisms, the infringement of rights becomes prevalent, hindering the ability of intellectual

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property owners to reap the economic rewards of their assets.

To foster a favourable environment for IPR protection, nations have implemented various strategies. These include the enactment of domestic laws and regulations, as well as the negotiation and ratification of international agreements and conventions. A notable example is the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), a cornerstone of the World Trade Organization. The presence of this agreement underscores the critical role of IPR-related laws and regulations in enabling intellectual property owners to achieve their economic and commercial objectives (Safaei, 2019).

Intellectual property can be broadly categorized into two primary domains: industrial property and copyright. Industrial property encompasses patents, trademarks, and industrial designs, while copyright protects artistic and literary works such as novels, poems, plays, sculptures, and architectural designs.

Within the realm of intellectual property rights, we find a diverse array of protections, including literary and artistic property rights (e.g., copyright, reproduction rights), patents, and commercial rights such as goodwill, trademarks, and trade secrets. Some legal scholars advocate for the term "intellectual property," asserting that the concept is distinct from material or external objects. They argue that the genesis of these rights lies in human thought and reasoning (Hosseini, 2015). However, other legal experts prefer the term "intellectual property rights," acknowledging that not all intellectual property issues necessarily stem from thought-based creations. Goodwill, for instance, falls under this category despite its non-material nature (Hosseini, 2015).

The usage of the term "intellectual property" can be traced back to at least 1867, when the North German Confederation granted itself the legal authority to protect intellectual property in its constitution. Subsequently (Hasting German Law Journal, 2001), the World Intellectual Property Organization (WIPO) was established in 1970 and gained the status of a specialized United Nations agency in 1974. During the 1990s, a significant number of developing countries joined WIPO treaties to bolster their intellectual property rights. Adherence to these agreements has had far-reaching implications for countries, particularly in the economic sphere (Fitras et al., 2019).

This article endeavours to examine intellectual property rights and their potential effects and advantages on economic development.

II. EFFECTS OF PROTECTION OF INTELLECTUAL RIGHTS IN ECONOMIC GROWTH AND DEVELOPMENT

A The terms economic growth and development might be used interchangeably, but they represent distinct concepts. Economic growth primarily focuses on quantitative changes, measuring variables such as gross national product (GNP). In contrast, economic development encompasses qualitative transformations within a society, often manifesting in growth. Therefore, economic development involves qualitative shifts in a society's economic structure and fundamental changes that impact GNP.

Extensive theoretical literature has explored the potential effects of intellectual property rights (IPRs) on economic and industrial development, leading to some ambiguity in this area. The effectiveness of IPRs depends on several factors, including whether multinational companies (MNCs) increase their investments in countries with strong IPR protections and the extent to which imitative activities are reduced. Over the past two and a half decades, policymakers have engaged in vigorous debates regarding IPR reforms. One of the key concerns raised is that IPRs can limit the ability of local companies to imitate advanced foreign technologies, potentially hindering economic progress. However, these costs may be partially offset by the benefits of increased investment and production by MNCs. Stronger IPRs can incentivize MNCs to expand their operations, develop more advanced products, and accelerate the transfer of existing technologies to countries with robust IPR regimes (Brasen Tetro et al., 2011).

Industrial property, a significant component of intellectual property, safeguards individuals' initiatives against third parties within specified geographical boundaries and for a designated period. IPRs are an indispensable element in the realm of domestic and foreign direct investment. Achieving the scientific and technological development goals outlined in the 1404 vision document necessitates a deliberate focus on intellectual property and its strategic application.

In recent years, Iran's Property and Deed Registration Organization (General Industrial Property Office), the custodian of industrial property registration (inventions, industrial designs, and trademarks), has implemented several initiatives to enhance human resource development and modernize patent office operations. Notably, the trademark law was enacted in 1923, with

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subsequent amendments in 1929 and 1958. In 1958, Iran joined the Paris Convention. Additional significant milestones in the country's intellectual property development include the approval of the law on the protection of geographical indications (for industries like carpet, pistachio, saffron, and food) and Iran's accession to the Patent Cooperation Treaty (PCT).

Among the General Directorate of Industrial Property's other programs are training and development initiatives for human resources, the organization of seminars and intellectual property conferences within the country, and efforts to leverage the IPASS patent software with the support of WIPO (Mirhosseini, 2017).

The advantages of applying intellectual property rights in economic development are multifaceted. Firstly, IPR protection safeguards innovators from unauthorized use and imitation of their products, enabling them to reap greater profits from their investments in research and development and the creation of new products. Secondly, by granting exclusive rights to innovations and their resulting products, IPRs empower innovators to set prices higher than the final cost, thereby incentivizing further investment in research and development and ultimately leading to an increase in inventions and innovations (Fatras et al., 2010).

Thirdly, IPRs provide inventors, designers, and creators with the option to grant licenses to others, allowing them to exploit their intellectual property in exchange for royalties. This represents a distinct privilege beyond the mere production of the product (Rafi'i Atani et al., 2013).

Finally, adopting and implementing laws related to intellectual property rights can yield international advantages. For example, membership in copyright agreements is a prerequisite for Iran's accession to the World Trade Organization. If an investor perceives weak IPR protections in a country, their motivation and confidence to invest in or collaborate on innovative development projects may diminish, as there is a risk that their designs and creations could be appropriated. Consequently, prioritizing intellectual property rights can contribute to a country's economic development by fostering international trust.

III. CHARACTERISTICS OF INTELLECTUAL RIGHTS

The ownership of intellectual property rights is intrinsically tied to the individual or individuals responsible for creating the work. While a legal person can possess the right to exploit a work, they cannot be considered the creator. Consequently, intellectual property cannot be transferred in its entirety to another party, as it encompasses intellectual rights that are inherently associated with the creator's identity.

Non-transferability is a defining characteristic of intellectual property rights. Even when the rights to a work are transferred to another person or entity through a contract, the underlying rights remain non-transferable. This principle is rooted in the nature of these rights, which demand a personal connection to the creator. While heirs may exercise certain rights, the fundamental ownership of the rights remains with the original creator. The author retains the authority to modify or even repudiate their work, a power that is not extended to their successors (Katouzian, 2020).Permanence is another hallmark of intellectual property rights. As stipulated in Article 4, the creator's rights are not limited by time or place and do not expire. Although Iranian legislation restricts the protection of material rights to works initially published within Iran, intellectual rights enjoy full protection regardless of publication location.Types of intellectual rights include:

•Right of first publication: This grants the creator the exclusive right to publish the work for the first time.
•Right of attribution: This ensures that the creator's name is associated with the work.
•Right of integrity: This protects the work from unauthorized modifications or alterations that could distort the creator's intent.

IV. INTELLECTUAL PROPERTY RIGHTS AND INNOVATION

Numerous studies have explored the relationship between innovation and economic growth and development, with notable contributions from scholars such as Schumpeter (1934), Solow (1956), and Romer (1986). However, research on the specific factors influencing the formation of innovation remains relatively limited.

Schumpeter's theory of creative destruction, introduced in his 1942 work "Capitalism, Socialism, and Democracy," provides a foundational framework for understanding innovation. Drawing inspiration from Marx, Schumpeter proposed that innovation is a dynamic process that continuously transforms the economic structure, destroying old products and creating new ones. By introducing a unique product to the market, an innovator establishes a temporary monopoly, limiting entry for imitators. This process of creative destruction drives economic

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development through innovation and the replacement of outdated technologies with newer ones. Schumpeter's theory highlights the time-bound nature of innovation, as a new product's dominance is eventually challenged by subsequent innovations (Tulose and Yurtkur, 2015).

Another significant theory in this field is Helpman's model (1993). In his analysis, Helpman distinguishes between two groups of countries: northern countries (developed) and southern countries (less developed). He posits that northern countries are innovative, while southern countries tend to imitate northern innovations. Helpman concludes that while stronger intellectual property rights can stimulate innovation in the short run, they may ultimately lead to a decline in the rate of innovation in the long run. This is because developed countries may prioritize production over innovation, as the protection afforded by IPRs allows them to exploit existing technologies without facing intense competition. As a result, the lack of competitive pressure may diminish the incentive for further innovation.

It's noteworthy that Helpman's theory directly contradicts Schumpeter's theory of creative destruction. According to Schumpeter, granting innovators a monopoly can actually spur more and better innovations from others.

Numerous economists, inspired by Helpman's theory, have presented articles critiquing or extending his findings. Sagi and Glass (1995) similarly demonstrate that stronger IPR protection can hinder the flow of technology transfer to the South. They identify imitation and foreign direct investment (FDI) as key channels for technology transfer, asserting that strengthening IPRs in the South can reduce both innovation and imitation rates, consequently limiting the flow of technology transfer.

Lai (1998) further explored the relationship between IPRs and innovation, emphasizing the importance of the technology transfer channel. He concluded that stronger IPRs in the South can facilitate technology transfer through FDI but may have the opposite effect if technology is transferred through imitation.

Okawa (2010) expanded upon Helpman's model by incorporating international capital transfer, examining the welfare implications of IPR consolidation in less developed countries. He introduced the concept of "integrated capital markets," contrasting it with Helpman's "separate capital markets" model. Okawa's analysis revealed that the integration of capital markets between the North and South can lead to favorable welfare effects for both regions, even when IPRs are strengthened in the South. This is because integrated capital markets can offset the losses incurred by IPR protection in the South, contributing to increased prosperity in both regions. Moreover, Okawa found that with sufficient imitation rates, the North can always benefit from stronger IPRs in the South. This suggests that the North's demand for IPR consolidation in the South may increase as international capital market integration progresses.

Conversely, some argue that IPR protection is essential for the formation of innovation. They contend that developed and developing countries require distinct technologies, and without IPR protection in developing countries, advanced nations may be less inclined to transfer their technologies. Additionally, companies operating in developed countries might respond to the lack of IPRs in developing countries by designing technologies that are less susceptible to imitation, potentially leading to lower levels of efficient technological research and innovation in those regions. It's worth noting that even if stronger IPR protection does not directly benefit developing countries, it can still contribute to global prosperity (Gannon and Moser, 2014).

V. CONCLUSION

This article has examined the subject of intellectual property rights (IPRs) and their potential effects and advantages on economic development. In contemporary economies, knowledge, research, and development play an increasingly pivotal role in the production of goods and services, driving economic growth. Supporting innovation and the creators of intellectual property is essential for fostering long-term economic development across various sectors, including industrial and cultural arts.

Effective intellectual property rights management is crucial for achieving this goal. It is recommended that a permanent, non-governmental secretariat be established to address the specific needs and challenges faced by inventors in the realmof intellectual property and technology commercialization. The secretariat should be supported by relevant organizations such as the General Directorate of Industrial Property, the Ministry of Science, and the Islamic Council.

To ensure the secretariat's effectiveness, it should actively seek to identify entities capable of undertaking technology commercialization. Additionally, the secretariat should establish coordination with various institutions and organizations, enhance communication channels, and stimulate the development of specialized

organizations aligned with technology development objectives.

Future research could delve into the practical effects of adopting IPRs on a specific sector by analyzing data collected over several years.

REFERENCES

[1]. Mr. Mehla; Malek Al-Sadati, Seyed Saeed and Salimifar, Mustafa. (2017). A dynamic model to investigate the relationship between intellectual property rights and economic complexity: A new knowledge-based innovation index study. Bi-quarterly Encyclopedia of Economic Law, 25(13), 157-188.

[2]. Hosseini, Seyyed Hassan. (2015). An introduction to intellectual property rights, Tehran: Mizan, second edition.

[3]. Rafii Atani, Ataullah; Kakai, Zahra and Fayazi, Neda. (2013). The role of intellectual property management in economic development; Challenges and Solutions, Economic Magazine, No. 3 and 4.

[4]. Safai, Seyyed Hossein. (2019). Introductory course of civil rights, first volume: persons and property, Tehran: Mizan, second edition.

[5]. Fitras, Mohammad Hassan; Farzin, Mohammadreza and Najarzadeh, Abolfazl. (2010). Investigating the effect of intellectual property rights on the innovation of developing Islamic countries. Economic researches, number 1.

[6]. Katouzian, Nasser. (2020). Introductory course on civil rights: property and ownership, Tehran: Mizan.

[7]. Mir Hosseini, Seyed Hassan (2017). An introduction to intellectual property rights, Neshramizan, Tehran.

[8]. Branstetter, L., Fisman, R., Fritz Foley, C. & K. Saggi (2011), "Does Intellectual Property Rights Reform Spur Industrial Development?,"Journal of International Economics, PP. 27–36.

[9]. Gnangnon, k. & Moser, C. (2014). Intellectual Property Rights Protection and Export Diversification: The Application of Utility Model Laws. WTO Working Paper, World Trade Organization, Economic Research and Statistics Division.

[10]. Hastings Law Journal. (2001). Article 4, No. 6 of the Constitution of 1867 (German). Vol. 52, P. 1255.

[11]. Lai, E.L.C. (1998). International Intellectual Property Rights Protection and the Rate of Product Innovation. Journal of Development Economics, 55, 115– 130.

[12]. Okawa, Y. (2010). Innovation, Imitation, and Intellectual Property Rights with International Capital Movement. Review of International Economics,18(5), 835–848.

[13]. Schumpeter, J A. (1976). Capitalism, Socialism and Democracy (5rd ed.). London, George Allen & Unwin.

[14]. Tülüce, N.& Yurtkur, A. (2015). Term of Strategic Entrepreneurship and Schumpeter's Creative Destruction Theory. Procedia - Social and Behavioral Sciences, 207, 720 – 728.