

China-US Relations within the Context of Intellectual Property Rights

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October 21, 2021

Abstract

China has been the center of heated debates because of its IP policy for decades. The total disregard of the Chinese government for intellectual property rights (IPR) is estimated to cost hundreds of billions of dollars for the developed countries each year. The US suffers the most, with its losses amounting to approximately \$300 billion annually. This paper will discover why China pursues such a policy and what it stands to gain or lose from it. It will be argued that today's IPR laws give too much leverage for developed economies and preclude underdeveloped or developing countries from accessing the technology they need for economic development. The historical precedent by which developed countries deliberately ignored foreigners' intellectual rights will be discussed. Finally, it will be concluded that developed and developing countries should not be held to the same standards in terms of IPR.

1 Introduction

China has garnered a reputation in the international economy for copyright infringement and counterfeit products over the past few decades. The total disregard of the Chinese government for intellectual property rights (IPR) is estimated to cost intellectual property holders, a great majority of which are from developed countries, hundreds of billions of dollars each year. The US suffers the most, with China's IP theft costing it between \$225 billion and \$600 billion annually [Gol18].

As the second-largest consumer market in the world, China thus attracts significant criticism regarding its IPR policy, including how it hampers innovation, economic growth, and employment all around the world [BCV17]. Therefore, many politicians and scholars argue that China ought to comply with the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), an international agreement that sets minimum standards for IPR laws [BCV17]. By contrast, however, economic analysis of the pernicious effects TRIPS and strict

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IP laws have on domestic industrial development not only justifies developing nations' failure to adhere to such regulations, but also demonstrates why it may be more beneficial on a global scale for these countries to do so.

In the following sections, I will first explain what IPR is and how it creates tensions between China and the US. Then, I will introduce the TRIPS Agreement and show how China intentionally enforces it in a poor manner. Next, I will explain the arguments against China's weak IPR enforcement and refute these arguments. I will discuss the historical precedent by which developed countries deliberately ignored foreigners' intellectual rights in the past, acting in direct contradiction to what they are advocating for in the present. Finally, I will argue that China, like all the other developing countries, should not be held to the same standards in terms of IPR as the US and other developed countries. I will specifically focus on China as it is the developing country most heavily criticized for its lax IPR policy and poor enforcement.

1.1 What is IPR?

According to the World Trade Organization, "intellectual property rights are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time" [Orgb]. These exclusive rights grant the creator a monopoly to ensure that they "receive a return on their investment" [Sti06]. IP is generally divided into two main categories: (1) industrial property, which includes patents for inventions, industrial designs, trademarks; and (2) copyright which covers literary, artistic, and scientific works. The extent of the protection differs by the type of intellectual property and ranges from as low as twenty years to as high as one hundred years [Org20]. This paper specifically focuses on industrial property, which constitutes the majority of the IP flow to China [BCV17] and, arguably, is the most important one for its development.

IP is like any other asset, as it can be bought, sold, or licensed. It differs from physical goods, however, in a few fundamental ways. First, it is non-rival, i.e. infinitely sharable. When you give it to someone, your ability to use it does not contract. For example, if a person gives someone else their house, they no longer have a house; but sharing IP does not inherently affect their ability to access or consume that IP.

Because the global poor cannot afford even basic amenities and do not buy things protected by IPR, such as software, drugs, and textbooks, IP holders cannot profit from those below a certain income level. Thus, sharing IP with the poor does not damage the IP holders. It is, therefore, unethical to withhold IP that is essential for economic development from the extremely poor and punishing them when they use "illegal" things such as unlicensed software. Furthermore, IP protection creates a government-granted monopoly whose costs and inefficiencies are supposed to, in theory, be offset by the gains from increased innovation [Sti06]. As we will see in the following sections, however, most industries do not require IP protection in order to innovate.

Although IP might sound like a modern concept, some scholars argue it

dates back to as early as 600 BC [Kwo14]. The first international IPR laws, however, emerged in the late 19th century with relatively poor cooperation and execution. It was not until TRIPS in 1994 that finally an effective international agreement was signed.

1.2 TRIPS Agreement

TRIPS is currently the most extensive and comprehensive international agreement regarding IPR. According to the WTO, the main principles and objectives of the TRIPS Agreement are “reducing distortions and impediments to international trade, promoting effective and adequate protection of IPRs, and ensuring that measures and procedures to enforce IPRs do not themselves become barriers to legitimate trade” [Orga].

Negotiations on TRIPS began in 1989 with its inclusion in the Uruguay Round’s multilateral trade negotiations, and “the driver behind this inclusion was the United States” [Ott15]. The negotiations were dominated by developed countries such as Japan, the member states of the EU, and especially the US [Pet11]. As a result, the agreement became heavily skewed towards already-developed countries [Yu06].

Only the least developed countries (LDCs) such as Afghanistan, Bangladesh, and the Democratic Republic of Congo (DRC) were seriously considered in the negotiations. Despite this consideration, only a mere 11 years were given to LDCs to transition their IPR policies in accordance with TRIPS. Although this transition period was later extended to 39 years, many poor countries cannot benefit from this extension since the criteria for LDC classification are extreme. In order to be recognized as an LDC, a country must have a gross national income (GNI) per capita lower than \$1018. This classification fails to recognize the dire and desperate situation of countries like Pakistan, Zimbabwe, and Tanzania simply because they have a GNI per capita slightly higher than \$1018. This situation hinders the economic development of these poverty-stricken countries and forces them to pay millions of dollars for IPR law enforcement.

2 China’s Weak TRIPS Enforcement

China has been criticized for its IP protection for decades. Although its IPR laws reached the standards of Western countries years ago, its enforcement of said laws remains relatively poor. Minor improvements have been made over the past few years, but there are still various ways in which China avoids proper IPR enforcement. The primary way is making the litigation process hard, costly, and lengthy, thereby deterring IP holders from litigating or aggressively pursuing infractions. Even if the outcome of the litigation is in favor of the plaintiff, the resulting low compensation levels fail to cover litigation costs [PACS17].

This poor enforcement is generally attributed to the Chinese government’s wish to gain economic benefit by “stealing” other countries’ property. Although this might be true, China’s communist past [ST14] and Confucianism [BCV17,

PACS17] might be playing a greater role since collectivist values resulting from them encourage people to share their knowledge for the good of the collective [MH06]. Therefore, it could even be argued that IPR in general and TRIPS, in particular, contradict certain countries' moral and religious beliefs.

2.1 Results of Weak Enforcement

The arguments for IP in China generally revolve around innovation. This is expected, especially considering that the primary purpose of IPR laws is fostering innovation. The importance of China in this context, though, is its enormous influence. As the most populous country in the world, it constitutes approximately 20% of the global population and 20% of the global economy. Therefore, the lack of IPR enforcement in China supposedly has serious results not only in China but also in the whole world. IP protectionists state that the results are especially detrimental for firms in industries such as pharmaceuticals and software development simply because copying and distributing a drug or software is cheap and most of the costs come from research and development [Sti06]. In 2011, for example, Microsoft, a software company, lost approximately \$6 billion in revenue in China due to unlicensed software [Ros].

Furthermore, IP protectionists argue that China's poor IP policy deters domestic and international companies from creating products exclusive to the Chinese market [BCV17]. For example, why would Microsoft, or any other company, invest money, time, and resources into China if there is a high possibility that its products will be pirated? According to IP protectionists, conducting marketing campaigns, developing products, or doing market research, in this instance, becomes completely unnecessary. This harms entrepreneurship in China and, in turn, the Chinese economy [BCV17].

2.2 Why Negative Results Are Not as Important as They Seem

China indeed exerts immense influence, but this influence is often exaggerated and misrepresented. Contrary to what many people believe, China's poor IP policy marginally reduces innovation in a select subset of industries at worst. This is due to some inherent advantages original creators have over imitators. These advantages incentivize innovation even in the absence of IPR laws, and three of these advantages are summarized by Professor Ha-Joon Chang in the following way: the imitation lag, reputational advantage, and the experiential advantage.

First, there is the imitation lag. It takes time for imitators to absorb the new knowledge and create a working prototype of the original product [Cha01]. It is even more problematic to create an efficient and reliable production chain. After Apple developed and launched the world's thinnest notebook, the MacBook Air, it took years for the competitors to build a laptop anything close to MacBook. And even when they did, Apple still outsold other companies since, over time, Apple became one of the most reputable companies in the laptop market. Even though there are almost exact replicas of the MacBook today,

such as the Huawei MateBook, they do not sell as much since customers have a tendency to buy from the most popular brands, which are generally the original producers [Cha01]. The third inherent advantage original developers have over imitators is the experiential advantage. Original developers are experienced with their products since they have spent lots of time on them. This results in a natural increase in productivity [Cha01]. Apple, for example, is much more experienced in thin notebooks than Huawei and, therefore, it takes much less resources for Apple to implement a change in the design or add a new feature.

These advantages show that the innovation does not stop in the absence of IPR laws. This claim is further substantiated with extensive research conducted by Edwin Mansfield [Man86]. In his research, he asked R&D executives of 100 companies what percentage of their inventions between 1981 and 1983 would not have been developed if there were no patent laws. Quite interestingly, the R&D executives in office equipment, motor vehicles, rubber, and textiles industries told him, on average, that zero percent of their new inventions would not be developed had there not been IP protection. The figure is also meager for instruments and primary metals, as can be seen from Table 1.

Industry	Percent That Would Not Have Been Introduced
Pharmaceuticals	65
Chemicals	38
Petroleum	25
Machinery	17
Fabricated metal products	12
Electrical Equipment	11
Primary metals	1
Instruments	1
Office equipment	0
Motor vehicles	0
Rubber	0
Textiles	0

Table 1: Inventions That Would Not Have Been Developed if Patent Protection Could Not Have Been Obtained, Twelve Industries, 1981-83

Several different studies further confirm these results [SR90]. In this regard, the examples given by scholars who blindly defend TRIPS are somewhat cherry-picked, as most industries do not require extensive protection and government-granted monopoly in order to innovate [Man86]. These, along with immense market opportunities, are the reasons why companies around the world continue to research and develop products for the Chinese market [FSL⁺19]. Microsoft continues to operate its second-biggest R&D center in China [Mic] not because it wants cheap labor but because it is intrigued by the market opportunities China presents.

Although it is true that many firms, including Microsoft, may lose revenue because of China, the impact does not present an existential threat to these companies nor does it push them to exit the market [BCV17]. The number given at the beginning of the paper (\$225-600 billion lost to China) is certainly large but it is exaggerated and misrepresented. It needs to be noted that even if China were to enforce TRIPS properly, only a small portion of this money would be transferred to American businesses. Many consumers, especially the poor ones, would simply refrain from using copyrighted products due to high prices. They would either be inclined to use cheaper and more inferior products or prefer not to use them at all (if they are not an absolute necessity).

3 The Double Standard of Developed Countries

Although the US pressures China and many other countries to follow the TRIPS Agreement, its history of IPR, like other developed countries, is far from impeccable. For instance, the US did not require a proof of originality for patents until 1836. Furthermore, it did not recognize foreign copyrights until 1891, more than a century after its founding [Cha01]. The situation was so grave that “during much of the 19th century, American pirates were busy appropriating British designs for looms and mills, and American publishers and producers extensively pirated foreign publications, art, and drama – with assistance from the US government” [PACS17].

Other developed countries were also no better at IP protection than the US. Industrial espionage (in which stealing trade secrets was the main goal) was very prevalent between European states, especially between France and the UK in the late 19th century [Har21]. Switzerland did not have proper IPR laws for most of its history. Its patent laws became comparable to the US’ only after World War 2 [Cha01]. Germany, one of the most reputable countries in terms of IPR, was a significant IP violator and a hub for counterfeit products [Cha01]. Canada, like the US, offered IP protection only to its citizens and not the foreigners until the end of the 19th century [PACS17].

The US could afford strengthening its IPR protection only when it became sufficiently developed, and its economy became sufficiently strong [PACS17]. But despite its history, the US still tries to impose IPR laws on developing countries substantially stricter than those the US itself had used.

The US’ double standards in IPR, however, are not only limited to a historical context. We can also see an obvious double standard that applies when the lives of American citizens are at stake. One such example is a relatively recent one from the 21st century. One week after 9/11, a series of attacks were carried out using anthrax, which targeted two senators and various media offices. Five people were killed, and seventeen were injured in the entirety of the attacks [SDC01]. At the time, the German drug company Bayer was producing Cipro, one of the most effective antibiotics against anthrax [Sti06]. When Bayer refused to lower the price of Cipro, the US government threatened Bayer with compulsory licensing.

It should be noted that there is nothing wrong with the US trying to save its own citizens; it could even be argued that the US had every right to pressure Bayer. The problem is that the US also strictly opposed the compulsory licensing of HIV drugs before the anthrax crisis. Only after massive public backlash exposing and criticizing this double standard did the US allow compulsory licensing of these life-saving drugs. Thousands of lives could have been saved, and tens of thousands could have avoided illness had the US agreed earlier to protect innocent impoverished lives rather than multi-billion dollar businesses in the pharmaceuticals industry.

4 Trend Towards IP Protectionism

As China develops economically, it becomes more conscious about IPR. As Peng et al. (2017) show, this increasing consciousness aligns with the historical trends followed by the US and other developed countries.

In the initial stages of their development, most countries choose to disrespect IP. Discrimination against foreigners and compulsory licensing of foreign patents become widespread [PACS17]. Countries like Britain, Germany, and Spain, for example, all used compulsory licensing as a means of economic development [PACS17].

In the later stages of development, however, countries slowly start to adapt IPR laws. All the countries mentioned above, including the US, made their IPR laws more extensive and comprehensive as more of their citizens wrote books, invented machinery, and marketed their products internationally [PACS17]. Considering China's fast economic growth in the absence of IPR, it may even be argued that the US will benefit from China's disregard for IPR, as it allows China to absorb foreign technology faster, increasing general welfare and thereby creating a wealthier trading partner that can buy more from the US in the future.

5 Conclusion

TRIPS has catastrophic consequences on developing countries, as it slows down the technology transfer that is required to foster economic growth. China's disregard for TRIPS is helping it develop economically and raise domestic standards of living, while the losses of the developed countries are not as significant as they are portrayed. Moreover, it is unfair and hypocritical for developed countries to impose TRIPS on developing countries, given their own history of lax IP laws.

To be clear, this paper is not advocating for the complete removal of IPR. Instead, it argues that TRIPS' one-size-fits-all policy is unfair and primarily benefits those who are already the best-off. TRIPS would be much better if it set different minimum standards for countries on different stages of development, perhaps by looking at the history of today's developed countries. This would be much fairer, as LDCs and developing countries could speed up the

technology transfer without worrying about breaking the international law or upsetting their trading partners. IP protection should also be abolished in certain industries where extensive protection does not help innovation and only creates counterproductive monopolies.

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