How to Cite This Article: Shah, S. Z. (2023). Intellectual Property Rights and Protection: A Comparative Analysis of Pakistan and China. *Journal of Social Sciences Review*, 3(1), 118–128.



Intellectual Property Rights and Protection: A Comparative Analysis of Pakistan and China

Sayed Zubair Shah

PhD Scholar, Department of Political Science, University of Peshawar, Peshawar, KP, Pakistan.

Vol. 3, No. 1 (Winter 2023)

Pages: 118 – 128

ISSN (Print): 2789-441X ISSN (Online): 2789-4428

Key Words

Intellectual Property Rights, Pak-China, Intellectual Property, Index of Property Rights

Corresponding Author:

Sayed Zubair Shah

Email: zubair_bacha@yahoo.com

Abstract: Invention and creativity are always driven by intellectual property rights (IPRs). Additionally, it boosts competitiveness among nations and generates new employment opportunities. The work of authors, artists, inventors, architects, and other IPR users is protected and benefited by IPR. After all, both developed and developing countries face significant difficulties when it comes to preserving intellectual property. The protection of the intellectual property is provided by several international laws. A number of principles are used by international law to affirm the protection of intellectual property. In addition, most nations have their own laws in place to safeguard their intellectual property rights. All of these national and international intellectual property rules, however, will be worthless if not implemented properly. The examination of intellectual property rights protection in China and Pakistan is the aim of this research work. To illustrate and describe the variations in IPR protection assessments, this study also compares international IPR indicators of both countries. This study's findings indicate significant differences between the IPR index and the final outcomes. All IPR indicators reveal that China has substantially done better than Pakistan in recent years, although outcomes range greatly from 2011 to 2022. The study recommends that policymakers should explore options for bilateral or multilateral cooperation in this field.

Introduction

Intellectual property rights (IPR) allow the creators and the inventors of products and services to get full commercial advantages from their inventions and creations (Khan, Habib, & Mehmood, 2019). However, it is claimed that the value of IPR is sometimes underappreciated owing to a lack of suitable IPR understanding, particularly in developing nations. Today, with new innovations and creations entering the market on a daily basis, intellectual property rights (IPR) are at the forefront of any company's day-to-day decision-making process (Ahmad, Bin Mohammad, & Nordin, 2019).

Intellectual property law protects everything created by a creative individual. There is widespread agreement that IP (Intellectual property) has to be safeguarded (Y. Ali et al., 2019). The legal protections given to an inventor or creator the reason to protect his creation or

invention over a period of time are known as "intellectual property rights" (IPR). These protections make sure that the inventor or his assignee gets all the money made off of the innovation or creative work for a specific amount of time (Babar, Jamshed, Malik, Löfgren, & Gilani, 2013). Patent law, trademark law, utility model law, industrial law, geographical indication law, trade law, and internet law are all examples of such regulations. In other words, intellectual property (IP) rights are a legal framework that recognizes and guarantees financial compensation to those whose work is first to market. The preservation of intellectual property is vital to the development of the economy and the progress of technology. Benefits the company's expansion in the IT and scientific sectors. The same can be said of invention, which is a driving factor in the progress of nations and of humanity

as a whole (Boni, 2019). It has been said that new ideas are what gives a country its spirit and are essential to building a prosperous society. It has also been shown beyond a reasonable doubt that the intellectual effort connected to the invention should be accorded adequate attention in order for public benefit to emerge from it. As, Intellectual property (IP) plays an essential role in today's economy, and the preservation of IP rights has a major effect on the state of the contemporary economy (Habib, Abbas, & Noman, 2019). There are just a few nations whose legal systems and methods of implementation demonstrate a more robust degree of protection for property and intellectual property. The appropriate preservation of property rights and intellectual property rights is seen as a crucial part of reducing economic, legal, and social challenges and a crucial part of progress and development. However, in certain countries, the protection of property and intellectual property rights is either not prioritized at all or is actively disregarded (Sajjad et al., 2022).

China places a high value on intellectual property (IP) in light of its importance to the collaboration between nations along the Belt and Road Initiative (BRI). But having IP protection in one country doesn't need it in other countries in the same area. Most BRI nations are developing nations with distinct languages, ethnicities, and customs. The IP collaboration mechanism on a global scale is lacking in BRI nations, and IP development and protection levels vary widely from country to country. As a result, Chinese businesses may be in trouble if they conduct operations in countries with a less robust framework for protecting intellectual property (M. Ali, Gen, & Saleem, 2020).

Comparatively, the China-Pakistan Economic Corridor (CPEC) is a significant component of China's Belt and Road Initiative (BRI) (Singh, Arya, & Jyoti, 2019). The BRI plans to connect countries all the way from China to Africa by way of Southeast Asia and the Baltic States in Europe. A number of energy and infrastructural projects

are at the heart of CPEC. Pakistan has the potential to become one of the most strategically significant nations in the area in light of China's Belt and Road Initiative (BRI). In recent years, due to the importance of CPEC for both Pakistan and China, Intellectual Property Rights (IPRs) have received significant attention and are employed by businesses of all sizes throughout the economies of both nations (Tahir, Gen, Ali, & Asif, 2022). There is a growing literature of empirical economic work that examines the development of Property Rights Protection in Pakistan and China and seeks to quantify the economic significance and effect of intellectual property rights. However, there are gaps in our understanding of the legal protections afforded to intellectual property in both nations due to the scope of the available studies. Thus, the purpose of the current article is to comparatively analyze the current intellectual property rights and its protection considering the Pak-Chinese legal perspective.

Objectives

- To comparatively analyze the current intellectual property rights and their protection considering the Pakistan and Chinese legal perspective.
- To give recommendations for improving intellectual property rights and their protection for both Pakistan and China.

Literature Review

World Intellectual Property Right Organization (WIPO)

The United Nations recognized World Intellectual Property Organization (WIPO) in the year 1967 through the WIPO treaty. It is a government organisation whose only purpose is to safeguard intellectual property. The major goal is to strengthen worldwide efforts to protect intellectual property through cooperation between governments and partnerships with non-governmental organizations. The 1883 Paris Convention for the Protection of Industrial

Property is the first and most important IP convention (Ali, 2017a,b; Ali et al., 2021a,b,c; Guo, Huang, & Wu, 2019). Patents, industrial designs, and trademarks were all given equal protection and recognition. An international office was also established to take over the Paris Convention's administrative duties. The famous Berne Convention for the Protection of Literary and Artistic Initiatives was proposed in 1886 to provide intellectual property rights with a worldwide standing and to align with legislative works on IPR after the 1884 Paris convention (Berne Convention for the Protection of Literary and Artistic Works). A similar international office was set up to manage the Berne convention. A unified worldwide organisation, Bureaux Internationaux Réunis pour la Protection de la Propriété Intellectuelle, was formed in 1983 by the merger of several international bureaus (BIRPI). In the years that followed, BIRPI was restructured into the more powerful and larger institution known as WIPO. Given the current importance of IPR, the WIPO now has a total of 184 member states and manages 24 international treaties (e.g., Ali et al., 2020a,b,c; Sadiq, Usman, Zamir, Shabbir, & Arif, 2021)

One of the primary goals of the World Intellectual Property Organization is to increase respect for IP laws in its member states. Aside from that, the WIPO's primary mission is the formulation of rules and regulations for the uniform application of IP laws across the globe. In addition to fostering cooperation among its member nations, WIPO serves as a sounding board for debates on the future of intellectual property (e.g., Ali et al., 2020a,b,c; Ahmed, 2019).

Intellectual Property Right System in Pakistan

On April 8, 2005, as a result of national progress and the pressing necessity of the moment, a separate government agency charged with protecting intellectual property was established under the supervision of the Cabinet. The IPO in Pakistan was originally handled by the Cabinet but was later moved to the finance department. In

time, the new Agency will include the existing Copyright, Patient, and Trademark Registry sections. The Policy Board, which is made up of representatives from both the public and private sectors, is responsible for the organization's overall management and direction (Zeb et al., 2019; Basit, 2019). In all, there are fourteen people on the Board. There is one representative from each province, one from the business sector, and five from the governmental sector. The Pakistan Intellectual Property Organization's primary responsibilities are listed below.

- Oversee the many sub-national branches.
- Raise people's consciousness of the need to protect intellectual property.
- Make a lawful suggestion to the Federal Government.
- Governmental entities (e.g., the FIA and the police) are responsible for enforcing national intellectual property laws.

Intellectual Property Right System in China

In the previous 30 years, the Chinese government has updated its IP rules four times: once in the early 1990s, once in the early 2000s, once after 2008, and once around 2019. The level of protection for intellectual property in China, however, remains a point of contention. Some academics argue that China's IP law has improved significantly over the past few years, that the gap between China and other developed economies will continue to shrink, and that China has made remarkable progress in IP law enforcement given the country's relatively brief history of IP law reform (Begum, Ashraf, & Muzaffar, 2019). However, China has developed IPR rules that largely satisfy international standards, and a separate set of experts shares the opinion that insufficient enforcement of IPR in China remains one of the major shortcomings in China's IPR system. Infringement of intellectual property rights (IPR) is still a problem in China, according to some academics, and the country's IPR regulations are difficult to understand since they fall under so many different categories. Because of its one-party control, they say, China does not seem to have followed the development pattern of other democratic nations, and the government there may apply the law selectively and arbitrarily (Sadiq et al., 2021).

Comparative Analysis of Pakistan and China Intellectual Property Rights and Protection

The China-Pakistan Economic Corridor (CPEC) benefits not just China and Pakistan but also the whole region and the business community there. Small and medium-sized enterprises (SMEs) in China and Pakistan have the chance to expand into new markets because of CPEC investment prospects. Small and medium-sized enterprises (SMEs) make up a large portion of Pakistan's business population and have the potential to contribute significantly to the country's economic development (Basit, 2019). The government of China places a high value on intellectual property protection as a means to further the country's and technological scientific development, cultural vitality, and economic development. In this regard, the Chinese government has built a comprehensive system to safeguard intellectual property and has been an active participant in agreements. several international Legal protection for intellectual property in China is extensive. The enforcement of intellectual property rights in China is being overseen by a governing body that was specifically constituted for that purpose (Begum et al., 2019). There has been a decent amount of empirical research developing conducted in nations demonstrate the significance of their efforts to the rest of the globe. Although intellectual property rights have been the subject of extensive study, comparative research between two nations, like China and Pakistan, has received comparatively less attention. To that end, this article provides a comparative analysis of the present state of intellectual property rights and their protection from a Pak-Chinese legal viewpoint.

Methodology

Research Design

A qualitative comparative analysis approach was adopted in the current study. Both quantitative and qualitative research methodologies have contributed to the success of this strategy. It melds the analytical methods of quantitative research with the inductive and comparative case-based strategies of qualitative research.

Measurements

There are numerous worldwide agencies to measure the intellectual property rights (IPR) of countries. This article examines the Property Rights Index of the Heritage Foundation, the Legal and Property Rights Index of Fraser Institute, and the International Property Rights Index of the Property Rights Alliance to draw broad conclusions on the state of intellectual property protection in Pakistan and China.

Data Collection

The International Property Rights Index of the Heritage Foundation and the Fraser Institute and Property Rights Alliance websites were used for secondary data for this research.

Results

Index of the Property Rights of Heritage Foundation

All around the globe, the Heritage Foundation is struggling for monetary independence. The Index of Economic Freedom compiled by the Heritage Foundation is predicated on 12 numerical and qualitative indicators spread over four main groups. The Heritage Foundation's Property Rights Index evaluates 190 countries on four primary factors: the rule of law, government size, regulatory effectiveness, and market openness (Raza, Wasim, & Sarwar, 2020). Property rights are intrinsically tied to a country's legal system, which is why they are considered part of the rule of law. When evaluating a country, property rights provide a qualitative measure of the extent to

which its legal system protects the freedom of its inhabitants to acquire and keep personal property freely. Governments' ability to uphold people's property rights is measured by the Public Property Rights Index. There is a correlation between a country's score on the Property Rights Index and its ability to safeguard the personal property of its citizens (Guo et al., 2019). The degree of corruption in a country's judicial system

is measured by the Private Property Index. The property rights index ranks and scores countries based on how well their legal systems safeguard private property.

The below table presents the comparison of the IP protection of China and Pakistan using data from the Heritage Foundation's Index of Property Rights.

Table 1

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
China	20	20	20	20	20	20	48	47	50	61	62	64
Pakistan	30	30	30	30	30	30	36	36	42	48	45	46

Property rights in China were ranked poor between 2011 and 2006 on the International Property Rights Index of the Heritage Foundation (Table 1). During this time span, Pakistan scored a total of 30 points. Therefore, property rights were not adequately safeguarded, and the legal system was inefficient. Nonetheless, China's economic growth was slow between 2011 and 2006. Further, this era was awarded a total of 20 points. This suggests that China's legal system is not up to date and that China does not sufficiently defend its property rights. On the other hand, China scored 48 points in 2017 to overtake Pakistan unexpectedly. In the meanwhile, Pakistan went from a score of 30 in 2016 to 36 in 2017. Pakistan was unable to keep it up in the second half of 2021, and their score fell to 45. China improved each time and finished with 62 points. There has been a tremendous amount of progress in both nations. Meanwhile, China will do an excellent job of safeguarding private property in the next years. Improvements of 50, 61, and 62 points throughout this time span are to be commended for China. This score demonstrates that China is taking steps to safeguard individual property rights. However, the court system in Pakistan is not functioning well. Corruption in the judicial system is possible, and the court may be subject to undue political pressure.

Index of the Legal System and Property Rights of Fraser Institute

Legal systems and property rights are ranked annually in World Economic Freedom, a publication of the Fraser Institute. It measures the extent to which individuals in the nation are free to make their own financial decisions. The Fraser Institute evaluates countries based on how well their laws and institutions foster economic freedom. A total of 42 indicators in five categories make up the legal system and property index of Fraser Institute. State size, legal structure and the protection of the property rights of citizens, sound money, and the crime rate are the five fundamental categories of the legal system and property rights index of Fraser Institute. A key component of both economic liberty and civil society is the guarantee of an individual's right to keep and use their property obtained lawfully (Habib et al., 2019). Important features of a legal system that is consistent with economic freedom include the rule of law, the protection of property rights, independent and impartial justice, and fair and effective enforcement of the law

The below table presents the IP protection regimes in China and Pakistan, based on the Fraser Institute's Index of Legal System and Property Rights.

Table 2

	2011		2012		2013		2014		2015		2016	
	LSPR1	PPR2	LSPR1	PPR2	LSPR1	PPR2	LSPR1	PPR2	LSPR1	PPR2	LSPR1	PPR2
China	5.5	5.81	5.45	5.70	5.14	5.13	5.13	5.10	5.25	5.19	5.20	5.24
Pakistan	3.43	4.48	3.39	4.42	3.38	4.06	3.37	4.17	3.29	4.29	4.34	3.50
	2017											
	20	17	20	18	20	19	20:	20	20	21	20:	22
	20 LSPR1	17 PPR2	20 LSPR1	18 PPR2	20 LSPR1	19 PPR2	LSPR1	20 PPR2	20 LSPR1	21 PPR2	20: LSPR1	PPR2
China		•										

- 1. Legal System and Property Rights (LSPR)
- 2. Protection of the Property Rights (PPR)

According to the Fraser Institute's research on national income and product growth, both Pakistan and China are utter failures when it comes to personal financial independence and the security of private property. Table 2 displays statistics showing that the quality of the legal system of Pakistan and the property rights index has been extremely low during 2012-2016. Amongst measures of the quality of its legal system and protection of private property, Pakistan scored 3.43 in 2011. Thereafter, Pakistan's scores were continually devalued, and the index declined in 2016. (4.34). The legal system of China and the property rights index were not great between 2012 and 2015, but they were better than those of Pakistan. China's legal system and protection of private property received a 5.20 on the 2016 ranking. In comparison, Pakistan has shown no further improvement. China's legal system protection of private property are likely to deteriorate worse in the coming years. Pakistan's performance and outcomes have steadily increased from 2016 to 2022. The legal systems and property rights index of Fraser Institute ranks China and Pakistan quite differently, and Pakistan has never been as good as China in protecting property rights.

International Property Rights Index of the Property Rights Alliance

One of the most well-known tools for gauging the security of property rights is the International Property Rights Index (IPRI), created by the Property Rights Alliance. This database provides a global perspective on IP protection. The idea behind this database is widely regarded as the most reliable and extensive one for researching the protection of property rights. International Property Rights Index (IPRI) was established to measure the health of property rights throughout the world. The Property Rights Alliance is a repository of information used to calculate the International Property Rights Index, which evaluates the safety of property rights throughout the world (IPRI) (Tahir et al., 2022). Intellectual Property Rights (IPR) consist of three basic components. Indicators of a country's political stability and adherence to the rule of law may be found in its Legal and Political Environment (LP). Legal representatives (LPs) are crucial in securing ownership of real and intangible property. Both PPR and IPR are crucial to a country's economic growth. Both PPR and IPR consider both legal and informal claims of ownership (Khan et al., 2019). Protecting ideas and creations is one of the main purposes of IPR. Patent and copyright protection are under the

umbrella of intellectual property rights (IPR), two of the most significant forms of IP.

The below table presents the IP protection regimes in China and Pakistan based on the International Property Rights Index of the Property Rights Alliance

Table 3

		20	011			20	12+		2013			
	IPRI	LP	PPR	IPR	IPRI	LP	PPR	IPR	IPRI	LP	PPR	IPR
China	4.52	5.25	3.54	4.52	5.31	4.31	6.56	5.54	5.45	4.93	6.33	5.74
Pakistan	3.53	2.85	4.67	3.92	3.1	2.54	4.81	3.01	3.74	2.77	4.15	3.51
	2014					20	015		2016			
	IPRI	LP	PPR	IPR	IPRI	LP	PPR	IPR	IPRI	LP	PPR	IPR
China	5.5	4.45	6.76	5.4	5.38	4.31	6.53	5.31	5.40	4.38	6.51	5.32
Pakistan	4.3	3.76	5.9	3.3	3.55	2.72	4.93	3.01	3.68	2.80	5.03	3.21
	2017					20	18		2019			
	IPRI	LP	PPR	IPR	IPRI	LP	PPR	IPR	IPRI	LP	PPR	IPR
China	5.71	4.52	6.99	5.61	5.90	4.79	7.0	5.88	6.03	4.93	7.14	6.02
Pakistan	3.47	2.90	4.23	2.34	3.63	2.90	4.53	3.47	3.87	3.17	4.80	3.64
		20	20			20)21		2022			
	IPRI	LP	PPR	IPR	IPRI	LP	PPR	IPR	IPRI	LP	PPR	IPR
China	6.04	4.96	7.14	6.02	6.08	4.85	7.13	6.27	4.53	6.13	6.13	5.31
Pakistan	4.14	3.35	5.34	3.73	4.21	3.23	5.54	3.8	4.51	3.55	5.31	3.63

- 1. International Property Right Index (IPRI)
- 2. Legal and Political Environments (LP)
- 3. Physical Property Rights (PPR)
- 4. Intellectual Property Rights (IPR)

The International Property Rights Index (IPRI) of the Property Rights Alliance shows that Pakistan is doing extremely poorly in protecting property rights. As can be seen in Table 3, Pakistan's IPRI rankings see continuous shifts from 2014 through 2021. As of 2017, Pakistan has a very low IPRI index score of 3.47. Pakistan's performance has been steadily rising over the last year, and the country's IPRI index score will continue to rise until 2021. In 2017, Pakistan's score fell to an alltime low of 3.47. Following this drop, the IPRI index value for Pakistan exhibited a good rebound; this upswing is expected to continue through 2022. But China was a lot better than Pakistan. While this improved their standing in the globe, it was still below par. The most significant development, however, is China's continued improvement of its property protection measures. When the IPRI was updated for 2020, China received a score of 6.045. China's performance has improved steadily over the subsequent years. It is expected that China will maintain its upward trend and get a score of 6.045 2022. Pakistan's Legal and Political Environment (LP) score varies continuously from 2014 to 2021. In 2015, Pakistan had an extremely low score of 2.72 on the LP index, placing it in the bottom ten globally. Following 2015, this score increased by a small margin; Pakistan's performance continued to rise over the following years, and the LP index score increased progressively in 2021. In 2015, Pakistan had a score of 2.72, its lowest ever.

Following this drop, the value of the LP index in Pakistan began to rise again, and this upward trend continued until 2021. Comparatively, China was a lot more successful than Pakistan, but the results were still below par internationally. The most significant development in China, however, is the country's ongoing improvement of its political and legal climate. In the 2015 LP index, China was ranked #4,316. China's indexing level will rise slowly but surely over the next four years. So, the total score in 2021 was 4.856. Table 3 shows the consistent ups and downs in Physical Property Rights (PPR) value from 2014 to 2021. Ultimately, Pakistan's 2017 PPR index score of 4.23 was quite low compared to other countries throughout the globe. The PPR index score has increased somewhat since 2017, and Pakistan's performance has continued to rise throughout the following years, leading to a modest increase in 2021. In 2017, Pakistan's score dropped to a record low of 4.23. When the PPR index value dropped, Pakistan's economy suffered, but the country has since shown signs of recovery, and this upswing is expected to continue until at least 2021. China, on the other hand, scored far higher than Pakistan. While this improved their standing in the globe, it was still below par. The most significant development in China, however, is the country's ongoing improvement of its political and legal climate. When measured against the PPR index, China was placed at 6.539 in 2015. China's indexing level will rise slowly but surely over the next four years. Consequently, the score in 2021 was 7.131. These findings demonstrate China's success in preserving property rights, in contrast to Pakistan.

Discussion and Conclusion

The primary aim of this research work was to examine the degree to which intellectual property rights in Pakistan and China are protected. This study provides a concise summary of the International Intellectual Property Rights (IPR) Protective Index, Ratings, and Rankings by analysing data from well-known think tanks,

including the Heritage Foundation, the Fraser Institute, and the Property Rights Alliance. This research also illustrates how the IPR ratings and scores assess the effectiveness of the actions implemented to safeguard intellectual rights. This study's findings indicate substantial discrepancies between the IPR index and the final outcomes released by a range of prior research. Because of discrepancies between the IPR index and the final outcome, this study provides a comparative critical note between the legal systems of China and Pakistan. All IPR indices reveal that China has substantially done better than Pakistan in recent years, although outcomes range greatly from 2011 to 2022, as shown by this research. When trying to evaluate China and Pakistan's ties, it's not easy to do so because of the disparity in data quality between the two countries. However, certain datasets were able to assess and provide suitable data on PPR and IPR protection. Despite having excellent legal systems and intellectual property rules, Pakistan and China are especially ineffective in protecting IP internationally. rights The insufficient application of legal and judicial systems in both nations is the primary cause for the dismal results of the International Intellectual Property Index. All significant international treaties and accords have been signed by both nations. Even people or the governments of such countries are not entirely aware of the preservation of intellectual property rights from a social and historical perspective.

It is hoped, however, that the government has started to take necessary steps to safeguard IPR in recent years. Human rights and economic growth and development are at the heart of the fight to safeguard intellectual property rights. Some studies claim that a country's economic growth and development may be drastically altered with the correct protection of intellectual property rights. There has to be a clear connection shown between property rights and economic development, but this is problematic. China may vet become an economically significant global

player, as shown by this comparison, despite its weak property rights enforcement. Similarly, Pakistan is among the developing nations that are drafting laws to safeguard intellectual property. In poor nations, illegal copying and counterfeiting are rampant but can be readily countered with strong IPR protection.

Recommendations

To improve the intellectual property rights and protection of both China and Pakistan, policymakers are recommended to explore options for bilateral or multilateral cooperation in this field. Additionally, policymakers should look into which international best practices can be adopted by both countries to ensure better compliance with intellectual property rights. Furthermore, policymakers should research any potential reforms needed in either country's legal system to further strengthen the protection of such rights. Likewise, it is recommended to review the current trends in developing countries regarding intellectual property rights and explore areas for collaboration and improvement. It is also recommended to review the current strategies employed by both countries for protecting intellectual property rights and identify areas for improvement. Additionally, both countries should look into the various avenues available to enforce intellectual property rights and develop proposals for more effective enforcement measures.

In the context of the China-Pakistan Economic Corridor (CPEC), intellectual property rights and protection are important aspects and should be given due consideration. Both countries should collaborate on enhancing the protection of intellectual property rights along the CPEC route by exploring potential reforms in their respective legal systems, adopting international best practices, and developing more efficient enforcement mechanisms. Additionally, both countries should take steps to ensure that any dispute resolution between them is carried out in a timely and effective manner. In the context of

the friendship between China and Pakistan, intellectual property rights and protection are essential for both countries to enjoy the benefits of their partnership. Both countries should work together to further strengthen the protection of intellectual property rights by exploring potential reforms in their respective legal systems, adopting international best practices, developing efficient enforcement more mechanisms. Additionally, both countries should take steps to ensure that any dispute resolution between them is carried out in a timely and effective manner in order to foster friendly cooperation in this field. Finally, it is recommended review the existing dispute resolution mechanisms between China and Pakistan and explores options for greater legal certainty in this field.

References

Ahmad, R., Bin Mohammad, H., & Nordin, S. B. (2019). Moderating effect of board characteristics in the relationship of structural capital and business performance: An evidence on Pakistan textile sector. *Journal of Studies in Social Sciences and Humanities*, 5(3), 89–99.

Ahmed, Z. S. (2019). Impact of the China–Pakistan Economic Corridor on nation–building in Pakistan. *Journal of Contemporary China*, 28(117), 400–414. https://doi.org/10.1080/10670564.2018.15422

- Ali, M., Gen, L. L., & Saleem, U. (2020). China Pakistan Economic Corridor: Intellectual Property Rights Importance & Protection for Small and Medium Enterprises (SMEs). GIS Business, 15(4), 1043–1057.
- Ali, N. (2017). Dimensions of school effectiveness in the secondary schools of Pakistan. *Malaysian Online Journal of Educational Management*, 5(3), 41–63. https://doi.org/10.22452/mojem.vol5no3.4
- Ali, N. (2017). Teachers' Perceptions of the Relationship between Principals'

- Instructional Leadership, School Culture, and School Effectiveness in Pakistan. TED EĞİTİM VE.
- BİLİM. https://doi.org/10.15390/eb.2017.7088
- Ali, N. Rahman, A. u., & Ahmad, B. (2020). The levels of suicide intention in secondary School of Pakistan: Students' perceptions. *sjesr*, *3*(4), 223–238. https://doi.org/10.36902/sjesr-vol3-iss4-2020(223-238)
- Ali, N., Niqab, M., Rashid, A., Rahman, A., Muhammad, G., Shah, M. (2021). Does Physical Education Effects Students' Learning, Motivation and School Effectiveness in Secondary Schools in Mardan District? *Turkish Online Journal of Qualitative Inquiry*, 12(10), 6413-6427.
- Ali, N., Rashid, A., Wahid, F. (2021). The Relationship Between Parental Pressure For High Marks, Students' Dropout And Suicide Intention In Secondary Schools Of Pakistan. Webology, 18(2), 1613–1626.
- Ali, N., Shah, M., & Hamid, A. (2020). The Levels of Examination's Phobia in English Subject: Students' Perceptions in the Secondary Schools of Pakistan. *Review of Education, Administration & LAW*, 3(2), 175–193. https://doi.org/10.47067/real.v3i2.51
- Ali, N., Ullah, A., Zeb, A., Faizi, W. U. N., Khan, M., & Rahman, A. (2020). Does Parental Pressure for High Marks Effects Negatively the Secondary Schools' Students in Pakistan? *Psychology and Education* 57(8), 1303–1311.
- Ali, N. (2021). Marks in English and parental pressure at school level in Mardan, Pakistan. Pakistan Social Sciences Review, 5(I), 718-
 - 731. https://doi.org/10.35484/pssr.2021(5-i)54
- Ali, Y., Asees Awan, M., Bilal, M., Khan, J., Petrillo, A., & Ali Khan, A. (2019). Risk assessment of China-Pakistan fiber optic project (CPFOP) in the light of multi-criteria decision making (MCDM). Advanced Engineering Informatics, 40, 36-45. https://doi.org/10.1016/j.aei.2019.03.005

- Jamshed, S. Q., Babar, Z., Malik, M. A., Löfgren, H., & Gilani, A. (2013).The pharmaceutical industry, intellectual property rights and access to medicines in Pakistan. The New Political Economy of Pharmaceuticals. 167-184. https://doi.org/10.1057/9781137315854__
- Basit, S. H. (2018). Terrorizing the CPEC: Managing transnational militancy in China—Pakistan relations. *The Pacific Review*, 32(4), 694–724. https://doi.org/10.1080/09512748.2018.1
 - **724.** https://doi.org/10.1080/09512748.2018.1 516694
- Boni, F. (2019). Protecting the Belt and Road initiative: China's cooperation with Pakistan to secure CPEC. *Asia Policy*, 26(2), 5-12. https://doi.org/10.1353/asp.2019.0024
- Guo, F., Huang, C., & Wu, X. (2019). Strategic analysis on the construction of new energy corridor China-Pakistan-Iran-Turkey. *Energy Reports*, 5, 828-841. https://doi.org/10.1016/j.egyr.2019.06.00
- Habib, M., Abbas, J., & Noman, R. (2019). Are human capital, intellectual property rights, and research and development expenditures really important for total factor productivity? An empirical analysis. *International Journal of Social Economics*, 46(6), 756-774. https://doi.org/10.1108/ijse-09-2018-0472
- Ishaque, W., Shah, J., & Shah, Z. (2019). Pakistan-China iron brothers: A new horizon of inter state relations. *Global Regional Review*, *IV*(II), 42-49. https://doi.org/10.31703/grr.2019(iv-ii).05
- Khan, M. D., Habib, R. I., & Mehmood, A. (2019). Intellectual Property Rights and Creative Economy; Way Forward for Pakistan. *Review of Economics and Development Studies*, 5(3), 469–478.
 - https://doi.org/10.26710/reads.v5i3.697
- Raza, M. Y., Wasim, M., & Sarwar, M. S. (2019).

 Development of renewable energy

- technologies in rural areas of Pakistan. *Energy Sources*, *Part A: Recovery*, *Utilization*, *and Environmental Effects*, 42(6), 740-760. https://doi.org/10.1080/15567036.2019.1588428
- Sadiq, M., Usman, M., Zamir, A., Shabbir, M. S., & Arif, A. (2021). Nexus between economic growth and foreign private investment: Evidence from Pakistan economy. *Cogent Economics* & Finance, 9(1). https://doi.org/10.1080/23322039.2021.1956067
- Sajjad, M. M., Wang, J., Abbas, H., Ullah, I., Khan, R., & Ali, F. (2022). Impact of climate and land-use change on groundwater resources, study of Faisalabad district, Pakistan. *Atmosphere*, 13(7),
- 1097. https://doi.org/10.3390/atmos13071097 Singh, A. K., Arya, A. K., & Jyoti, B. (2019). A conceptual review on economic, business,

- intellectual property rights and science & technology related activities in Asian economies. *JNNCE Journal of Engineering & Management (JJEM)*, 3(2), 1–22. https://dx.doi.org/10.37312/JJEM.2019.030201
- Tahir, M., Gen, L. L., Ali, M., & Asif, M. (2022).

 Analyzing the trademark protection index of China and Pakistan: A comparative study. International Journal of Law and Politics Studies, 4(1),
 - 31. https://doi.org/10.32996/ijlps.2022.4.1.4
- Zeb, A., Ali, N., Ullah, A., Nisa, W. U., Khan, M., Rahman, A. (2019). The Influence of Inclusive Educational Practices on the Academic Behavior of Students at Secondary Level. *Elementary Education Online*, 18(1), 451-456. http://dx.doi.org/10.17051/ilkonline.2019.527