

# FEASIBILITY STUDY ON THE DEVELOPMENT OF THE CHINA-PAKISTAN ECONOMIC CORRIDOR USING GAME THEORY

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## Summary

This study analyzes the feasibility of the China-Pakistan Economic Corridor (CPEC) within the Belt and Road Initiative using Game Theory to assess the interests of involved actors. Key factors examined include China-Pakistan relations, regional insecurity, investment strategies, debt traps, and India's stance. Two game scenarios are designed: one between China and Pakistan, and another considering India's response. Results indicate China holds a strategic advantage, solidifying its economic and geopolitical influence in Asia.

**Keywords:** China-Pakistan Economic Corridor, Game Theory, Belt and Road Initiative, geopolitics, investment, security, debt trap.

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In 2013, the Chinese government announced a connectivity and economic development strategy that promotes trade from China through Asia and Africa to Europe: the Belt and Road Initiative.

The initiative is divided into two parts: the Economic Belt, which comprises overland routes from China to Europe, and the Maritime Road, which is made up of numerous maritime trade routes from South Asia, the Middle East, Africa and Europe.

The proposal focuses on building roads, railroads, airports, ports, dams, factories and other types of transportation, goods production and energy infrastructure along the routes.

For the purposes of this research, the focus was on the China-Pakistan Economic Corridor [CPEC], where the two routes of the initiative meet, and where the important factors mentioned above are present.

Among the main reasons for promoting this initiative is China's intention to become the world's leading economic and political power.

Other important factors surrounding the China-Pakistan Economic Corridor include: the change of government in Pakistan in 2018 [which involved the revision of treaties signed by the previous administration], the terrorist threat in Pakistan, the debt trap the Chinese presence in the Indian Ocean as a result of its expansion along the initiative's routes.

Given the complexity of studying so many variables, it was decided to use Game Theory as a theory of international relations with the intention of analyzing this problem. This theory was chosen because it is "...a powerful tool for broadening our understanding and stimulating research. The price paid for such power lies in the assumptions and work required to link deductive logic with empirical reality" (Snidal, p. 36, 1985).

Having clear assumptions, the power of a model in this theory derives from its simplicity, that is, the assumptions on which it is based must capture the essence of the situation, not the irrelevant details (Osborne, p. 1, 1992).

It is important to note that, at the time of conducting the research for the degree work, it was determined that August 20, 2018 would be the deadline for the collection of information, because it is a topic in constant development.

## **The emergence of the Belt and Road Initiative**

This project seeks to solve the slowdown of economic growth in China, since in 2010 the growth rate was 10.6%, but by 2015 this would drop by 6.9%. In 2016 it would fall to 6.7%, being the lowest record in 25 years, and returned to 6.9% in 2017 (Yifu Lin, January 2, 2016).

In the Chinese government they hope that with the first plans of the initiative in action em-piece the recovery, as this is "...the first time China has experienced such a prolonged period of slowdown after the transition to a market in 1979" (Yifu Lin, January 2, 2016).

According to Nick Marro, an analyst at the Economist Intelligence Unit [EIU], one of the main causes of the slowdown in China's economy is due to widespread overcapacity in heavy industries such as steel, cement and aluminum. For this reason, China is looking to use the initiative as a way to send its own domestic overproduction offshore (May 12, 2017).

## **Pakistan's relationship with China**

Overall, Pakistan enjoys a multifaceted and deep-rooted relationship with China, underpinned by mutual trust. Islamabad<sup>1</sup> has prioritized close ties with China, and Beijing has provided extensive economic, military and technical assistance to Pakistan over the years (Pant, August 14, 2018).

This relationship was particularly close during the tenure of Nawaz Sharif (2013- 2017), who was removed by the Supreme Court in 2017 on corruption charges. After a transition pe-riod, he was replaced by opposition candidate Imran Khan, a famous former Cricketer.

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<sup>1</sup> Capital of Pakistan

One of Khan's campaign banners was the review and opening up of the CPEC agreements signed by the Sharif administration and what Khan called a 'real change' (Hussain, August 12, 2018).

However, according to Michael Kugelman, Deputy Director and Senior Associate for the South Asia Program at the Woodrow Wilson International Center for Scholars, "China has a strong interest in its footprint in Pakistan regardless of who leads the Pakistani government" (August 20, 2018).

Likewise, an editorial in the South China Morning Post (August 2, 2018) states that Khan may ultimately have no choice because the Pakistan Military has pressured him to maintain close ties with China to ensure the flow of more than \$60 billion in loans for China-Pakistan Economic Corridor infrastructure projects.

## **Insecurity in Pakistan**

A major issue facing China with the development of the Corridor is security in Pakistan due to the strong terrorist threat present in the country. Derek Wank (August 27, 2017), Chief Executive Officer of Infoshare, a business consultancy in Islamabad, states that security is the number one concern of newly arrived Chinese nationals.

The magnitude of the problem is such that, by 2017, violence cost Pakistan 13% of its GDP (Institute for Economics & Peace, June 2018).

Andrew Small (August 17, 2017), an expert on China-Pakistan relations at the German Marshall Fund, asserts that the state is trying to meet its hard-earned security challenge in economic terms. To this end, Pakistan formed a force of 15,000 troops called the Special Security Division, instructed to protect Chinese-backed projects and the people working on them.

Beyond the security threat to Chinese nationals in Pakistan, and the infrastructure works, controlling the flow of extremists to China at a time of growing internal turmoil in Pakistan remains a major problem for the Chinese authorities (Sharma, April 21, 2015).

## **The investment**

China launched the Asian Infrastructure Investment Bank [AIIB] in 2016, which, according to its website, is a multilateral development bank that is headquartered in Beijing and has 87 approved members that include Germany, France, and the United Kingdom (2017).

According to Enda Curran of Bloomberg this is the first multilateral development bank in a generation, and he called it 'the World Bank of China' (August 6, 2016).

Since its creation, some critics claim that most of the investments accompany projects under the Belt and Road Initiative, and believe that the AIIB is only an avenue for countries that oppose the Initiative to accept investments from China (Curran, August 6, 2016).

In mid-2017, Laurel Ostfield, AIIB's director of communications, stated that because a project is from the Initiative they are not necessarily going to invest in it, adding that "Obviously there is a connection, but we are a separate entity" (July 15, 2017).

When the Economic Corridor project was announced in Islamabad in 2015 by Chinese President Xi Jinping, Pakistan's then Prime Minister Nawaz Sharif anticipated that it would be financed primarily with Chinese money, as Pakistan was not in a position to deploy the necessary capital after taking a bailout from the International Monetary Fund in 2013 (Dilawar, October 26, 2017).

Despite Sharif's statements, according to journalist Dilawar, Pakistani banks claim they are willing to invest in the Economic Corridor, and have more than \$20 billion for it, but most of it has been taken up by Chinese companies or banks and the AIIB (October 26, 2017).

On this, Saad Hashemy Director of Research at Karachi Topline Securities, stated that as of the end of October 2017, between \$6 billion to USD \$7 billion is probably being invested, and that, of that, only 10 percent, would be local funding, while the remaining 90 percent would come from China (October 26, 2017).

The lack of Pakistani participation in the China-Pakistan Economic Corridor, which the government claims would boost economic growth to 6% in FY2017, adds to concerns that its benefits may not be as widely distributed among the Provinces or even to Pakistan as initially thought (Dilawar, October 26, 2017).

## **Debt Trap**

A concern for Pakistani and international analysts regarding the Economic Corridor is the possibility of Pakistan falling into what has been termed the 'Chinese debt trap'.

The 'debt trap' consists of China granting large loans to underdeveloped countries with allied governments, generally for infrastructure development, without imposing strict repayment conditions. The natural consequence is that in the medium to long term the debtor country will not be able to meet its repayment commitments.

To settle the debt, China takes control of the infrastructure works and sometimes takes over the territory under concession, as in Sri Lanka.

In that particular case, the Sri Lankan government, faced with a USD 8 debt with onerous interest rates (Hindustan Times, May 11, 2017), was forced to give a 99-year concession on a port built by a Chinese state-owned company and 15,000 acres of land [about 60 square



kilometers], as they were not in a position to repay the loan given to them by China to build it (Abi-Habib, June 25, 2018).

## The ‘Pearl Necklace

Some Pakistani security analysts “...believe China is less interested in developing a road and logistics network that would allow access to the Arabian Sea and Persian Gulf from- Xinjiang through Gwadar than it is in using the port for military purposes” (International Crisis Group, June 29, 2018, p.18).

These accusations are based on two elements: the first is the apparent little real commercial potential of Gwadar Port, which will be proven when the Economic Corridor is more advanced and starts to play its role, as it would be difficult to assess CPEC’s impact on Pakistan at the beginning (Esteban, July 5, 2017).

The second element is based on the ‘String of Pearls’ theory. According to periodist Saeed, Gwadar will be part of this Necklace, which is a kind of ring of ports around the Indian Ocean, specifically in Pakistan, Sri Lanka, the Cocos Islands, Bangladesh, Burma, Djibouti and Seychelles, which aim to outflank China’s nuclear-armed rival for supremacy in Asia, India (August 17, 2017).

One of the consequences of this would be that China would then exert a much more powerful influence in the Indian Ocean, despite the fact that “...geographically speaking, China is not an Indian Ocean power” (Sharma, April 21, 2015).

## India’s position

Since the China-Pakistan Economic Corridor was announced, India has been critical of the project, claiming that projects in the Kashmir area, claimed by them and divided in possession with China and Pakistan, undermine their sovereignty.

According to Sushma Swaraj, India’s External Affairs Minister, it is unacceptable to the Prime Minister that the CPEC, which runs through Pakistan-occupied Kashmir, should go ahead (June 1, 2015). Ram Madhav, an influential leader of the ruling Bharatiya Janata Party, agreed that India could not sign up for the Belt and Road while the China-Pakistan Economic Corridor, a large part of this initiative, runs through parts of Pakistan-administered Kashmir that India considers its own territory (May 20, 2017).

Chinese authorities directly sought to address India’s concerns about the Initiative, arguing that it would not affect the territorial status of Pakistan-occupied Kashmir, since after all the Chinese-built Karakorum-Kunlun road has traversed that region since the 1960s (Hindustan Times, May 11, 2017).

## The games

Two games were designed for the analysis, the first was between China and Pakistan, with the intention of defining the scenario for the possible development of the Economic Corridor. The interests of the actors within each country that could have an influence, such as the army in Pakistan, were taken into account and the general interests of both countries were defined.

The outcome of this game is for China to develop the Corridor on its terms, given Pakistan's need for investment, the lack of options other than China to obtain it, China's interest in Pakistan falling into the debt trap and thus giving it control of the Gwadar port to consolidate the String of Pearls.

Some possible scenarios where the premises, and therefore the results would be affected, could be if the Imran Khan government continues to investigate the treaties signed by previous governments with China and finds clauses not compatible with Pakistan's laws, it could declare them null and void, and this would change the perspective quite a bit.

Another element would be an increase in terrorist activity in Pakistan, as this would increase the risk of investment and hence more pressure from China to take action against the insurgents. This pressure could include the incursion of Chinese troops into Pakistani territory.

However, given the outcome of the China-Pakistan game, it is possible that both states could improve their situation by changing their priorities and interests. For China, it would be ideal to include in the Belt and Road proposal a clearer and more specific vision of economic development for each country that joins, beyond seeking connectivity with Europe.

Doing so may have two consequences: first, many countries would have more incentive to join the initiative; and second, those that are already part of the initiative would have a greater purchasing power to consume Chinese services products.

Pakistan, for its part, could look for other sources of investment to solve its internal crises, although this is quite complicated. To achieve this, it is necessary to combat the high levels of government corruption, as this increases the investment risk and makes it more difficult to solve the problems with a real budget.

For the second game, it was taken into account that China and Pakistan cooperate as a result of the first game, so in the second game against India they act as a coalition. In case of India, there is a consensus among internal actors on the situation presented, so their interests are clear.

In this game, India's limited range of action vis-à-vis the corridor, especially in the absence of international support, stands out. Since it cannot directly disrupt Sino-Pakistani relations and does not find arguments to threaten the use of force, India has no clear strategy to oppose the development of the corridor or main threat to its national security, the Pearl Necklace.

One way in which India can improve its position is if it manages to devise some alliance scheme in Asia to try to counter this Belt and Road momentum. It will not be able to overcome it, given the amount of capital China is willing to invest, but at least it would not be so far behind in its economic development and regional power.

Another element that could change the outcome is an alliance with the United States, which in recent years [2017 and 2018] has shown not to have as open a foreign policy as in previous administrations. An example of this is their exit from the Trans-Pacific Economic Cooperation Agreement, which ensured their presence and strength in Southeast Asia by the inclusion of Japan, Vietnam, Malaysia, Singapore and Brunei.

The U.S. also threatened to block IMF loans to Pakistan, assuring that U.S. taxpayers' money would not be used to repay China's loans.

The immediate consequence of this blockade is that Pakistan, because of the high risk involved in investing in this country, does not get other foreign direct investment alternatives, and falls into the debt trap, the most favorable scenario for China, given the position of power it confers on it. From a pragmatic point of view, the United States actually provided a better chance for China to achieve its objective.

In the case of the United States, isolating itself from Asia is not a move that benefits it, since it leaves the way open for China to establish alliances with all the countries that join the Initiative. Therefore, establishing an alliance with India to establish such a joint alliance scheme could help them compete with China for regional influence.

Despite these two situations, since India's formal alliance with the United States against the Belt and Road and the Economic Corridor has not been established, and the United States has not taken any action on the Economic Corridor, India was not included in the analysis as a player.

Therefore, of the two results of the games, the one with the lowest probability of error due to changes in the assumptions under which they were constructed is that of the second game.

## Conclusion

During the research, there were important changes that extended the data collection period, such as the Doklam events, when tensions between China and India escalated to historic levels<sup>2</sup>; the 19th Communist Party Congress in China, where Xi Jinping gained more power; the elections in Pakistan, where a Party that had never ruled before gained a majority in Parliament; China's success in applying the debt trap in Sri Lanka, among other important events that were highlighted in the analysis of facilitating factors and difficulties.

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2 Events occurred in 2017 on the India-China border, where from the Chinese side an attempt was made to expand a dirt road towards the Indian border, which caused movement of Indian troops towards the site, and then an equal response from China, which caused tension between the two governments.

In the event that the scenarios presented in this paper become reality, there would be geopolitical consequences for the balance of power in Asia, since with Gwadar China would control seven ports in the Indian Ocean, and would have the connection between the two Belt and Road routes in Pakistan, which would allow it to greatly promote the transformation of its less developed regions.

In addition, China would find a use for much of its overproduction in heavy industry and help it to maintain its economic growth. Another important element is that the development of the Corridor sets a precedent in the Initiative, because, despite its magnitude, it shows that it is feasible. All this brings it closer to achieving its goal of becoming the world's leading power, both economically and politically.

For Pakistan, it would mean the construction of infrastructure in its territory that could help solve the economic crisis, the energy crisis and the limitations of internal mobility, especially because of the cost to the country's economy.

Finally, it will be a very bad scenario for India, where its regional rival will strengthen its influence and economic power, while consolidating its control of trade routes in the Indian Ocean with strategic positions around its more than seven thousand kilometers of coastline, the closest being the Port of Hambantota in Sri Lanka and the Port of Gwadar in Pakistan.

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