

IMPACT OF CHINESE FOREIGN DIRECT INVESTMENT ON RECIPIENT COUNTRIES (CASE OF PAKISTAN)

Cited as:

Voronin, V. (2024). Impact of chinese foreign direct investment on recipient countries (case of pakistan). *Revista Gestão & Tecnologia*, 24,16–30. <u>https://doi.org/10.20397/2177-6652/2024.v24.2760</u>

Valeriy Voronin

St. Petersburg University, Russia. ORCID : <u>http://orcid.org/0009-0005-2010-547X</u> E-mail: <u>voronin.26@inbox.ru</u>

ABSTRACT

Objective: The article investigates the economic impact of Chinese Foreign Direct Investment (FDI) on recipient countries, focusing on Pakistan as a case study. The goal is to analyze how Chinese FDI influences Pakistan's economic development, particularly through the China-Pakistan Economic Corridor (CPEC) and other initiatives.

Methods: The study utilizes data from various sources, including the World Bank, Ministry of Commerce of the People's Republic of China, and Pakistan's Bureau of Statistics. It employs correlation modeling and graphical analysis to examine the relationship between Chinese FDI and Pakistan's GDP growth. The analysis also considers environmental and social impacts, using data from the China Global Investment Tracker.

Results: The findings indicate a strong positive correlation (85%) between Chinese FDI and Pakistan's GDP growth. Chinese investments, particularly in energy and infrastructure, have significantly contributed to the country's economic development. However, some negative impacts, such as increased CO2 emissions and environmental risks, were also identified.

Contribution: This research provides valuable insights into the dual nature of FDI: while it can drive economic growth, it may also have negative environmental consequences. The study recommends that Pakistan's government actively manage incoming FDI by prioritizing eco-friendly projects and renewable energy investments.

Conclusion: The study concludes that Chinese FDI has had a largely positive impact on Pakistan's economy, especially in terms of infrastructure and energy sector development. However, to maximize benefits and minimize environmental harm, the authors suggest that recipient countries, like Pakistan, adopt more strategic policies in managing foreign investments.

Keywords: Foreign Direct Investment (FDI). China. Pakistan. FDI impact. Economic governance.

Editor Científico: José Edson Lara Organização Comitê Científico Double Blind Review pelo SEER/OJS Recebido em 20.09.2023 Aprovado em 19.02.2024

This work is licensed under a Creative Commons Attribution - Non-Commercial 3.0 Brazil





IMPACTO DO INVESTIMENTO DIRETO ESTRANGEIRO CHINÊS NOS PAÍSES RECEPTORES (CASO DO PAQUISTÃO)

RESUMO

Objetivo: O artigo investiga o impacto econômico do Investimento Direto Estrangeiro (IDE) chinês nos países receptores, com foco no caso do Paquistão. O objetivo é analisar como o IDE chinês influencia o desenvolvimento econômico do Paquistão, particularmente através do Corredor Econômico China-Paquistão (CPEC) e outras iniciativas.

Métodos: O estudo utiliza dados de várias fontes, incluindo o Banco Mundial, o Ministério do Comércio da República Popular da China e o Bureau de Estatísticas do Paquistão. Emprega modelagem de correlação e análise gráfica para examinar a relação entre o IDE chinês e o crescimento do PIB do Paquistão. A análise também considera os impactos ambientais e sociais, com base em dados do China Global Investment Tracker.

Resultados: Os resultados indicam uma forte correlação positiva (85%) entre o IDE chinês e o crescimento do PIB do Paquistão. Investimentos chineses, especialmente nos setores de energia e infraestrutura, contribuíram significativamente para o desenvolvimento econômico do país. No entanto, alguns impactos negativos, como o aumento das emissões de CO2 e os riscos ambientais, também foram identificados.

Contribuição: Esta pesquisa oferece insights valiosos sobre a dupla natureza do IDE: enquanto pode impulsionar o crescimento econômico, também pode trazer consequências ambientais negativas. O estudo recomenda que o governo do Paquistão gerencie ativamente o IDE recebido, priorizando projetos ecológicos e investimentos em energias renováveis.

Conclusão: O estudo conclui que o IDE chinês teve um impacto amplamente positivo na economia do Paquistão, especialmente em termos de desenvolvimento de infraestrutura e setor energético. No entanto, para maximizar os benefícios e minimizar os danos ambientais, os autores sugerem que os países receptores, como o Paquistão, adotem políticas mais estratégicas para gerenciar os investimentos estrangeiros.

Palavras chave: Investimento Direto Estrangeiro (IDE). China. Paquistão. Impacto do IDE. Governança econômica.

INTRODUCTION

Foreign investment play an important role in modern global economy. Nowadays, all countries hope to receive foreign investment to support and develop national economies (Kiseleva et al. 2023; Bezdudnaya et al. 2022; Panasenko et al. 2023). Globalization and integration of national economies develop stronger international economic cooperation between countries with the international division of labor and multinational supply chain (Safiullin et al.







2023; Petrina et al. 2023). Therefore, outward and incoming FDI takes a key importance in countries' economic strategies and policies.

Chinese FDI export started in 1999, with the announcement of the "Going Out" policy (走出去战略), which supported outward foreign investment and encouraged national enterprises to invest abroad (The State Council of the People's Republic of China, 2006). A few years later, China became a member of the World Trade Organization (WTO), which brought additional major advances in FDI policy and opened new prospects for international investors (Huang & Xie, 2020; Ray & Simmons, 2020).

In 2006, Brazil, Russia, India and China jointly formed BRIC, each country is the world's ten largest countries by population, area, and GDP (PPP). After the joining of South Africa in 2010, BRICS started to establish other internal institutes such as New Development Bank to support further integration among countries.

In 2013, the "One belt - one road" (一带一路) (BRI) caused additional stimulation to increase the number of outward FDI. The new initiative promotes the development of Eurasian as well as global infrastructure to improve connectivity and cooperation on a transcontinental scale. It also encourages investment in nearly 70 countries (The World Bank, 2018). In 2020, China temporary overpassed the United States and became one of the largest source outward FDI in the world (Ministry of Commerce of PRC, 2021).

Economic cooperation between Pakistan and China started in early 2000-s and has been developing very rapidly. Considering the investment and economic relations between China and Pakistan, it is possible to identify many advantages and disadvantages of this cooperation. The research article proposes the following hypothesis: Chinese accumulated FDI has a positive impact on Pakistan's economy in terms of GDP growth.

The geopolitical situation around China, caused by technological sanctions and the trade war led by anti-Chinese alliance, has reoriented the geography of Chinese outward FDI as well as the sectoral selection of economic partnership.

The second phase of the China-Pakistan Free Trade Agreement (CPFTA), which entered into force on January 1, 2020, expanded the scope of goods for trade liberalization (The Pakistan Business Council, 2019). As of 2022 almost 1,000 goods enjoy zero tariffs in their respective markets, which gives an additional support towards investment, production and distribution of goods. Trade between China and Pakistan have been increasing dramatically over the last 15 years (Mangi, 2022). There is potential for further benefits to Pakistan in terms



of increased demand for Pakistani exports and increased supplies of inputs that can improve efficiency and reduce the costs to Pakistani companies.

The analysis uses data from official statistics published by the Ministry of Commerce of the People's Republic of China, however, it does not allow to view the whole picture of Chinese investment flows, as significant amounts of investment flow go through offshore jurisdictions via third countries (UNCTAD, 2016). For example, Hong Kong (PRC), the Virgin and Cayman Islands accumulated up to 75% of outgoing FDI at the end of 2019 (UNCTAD, 2020). In order to limit this discrepancy the research articles also use China Global Investment Tracker statistics that track investment flows based on the investment projects.

LITERATURE REVIEW

China is considered the most powerful economy among the BRICS members. The country is the world's largest producer of goods and services and a leading exporter. China also has one of the largest populations in the world, and this creates significant opportunities for its participation in international trade and investment.

Multiple theories in the literature highlight both positive as well as negative effects of FDI on recipient countries. According to the research of K-Y. Cheung and P. Lin one of the positive impacts of FDI is new technologies that come with it. Many FDI recipient countries benefit from new technologies that improve a country's production efficiency and potential. New technologies also accelerate the development of the skills of local specialists and create a more competitive labor force (Cheung & Lin, 2004).

The research of Huang and Xie (2020), highlights another positive impact of Chinese FDI such as job creation and tax generation. In the research, economics have shown that since 2013 Chinese-funded overseas enterprises have paid more than USD \$100 billion in various taxes. In 2017, Chinese-funded enterprises globally employed more than 1 million foreign employees (Huang & Xie, 2020). Pakistan government forecast that China–Pakistan Economic Corridor (CPEC) will result in the creation of 2.3 million jobs between 2015 and 2030 and add 2% - 2.5% to the country's annual GDP growth (Shah, 2016).

The National Bureau of Economic Research has published a working paper that showed the FDI flow increase, especially at the end of the 20th century, caused the expansion of transnational companies and the growth of goods production, which largely changed the structure of international trade (Helpman et al., 2003). New established transnational companies help recipient companies to localize production and start to export products. Therefore, in the



long term, FDI opens new export opportunities as well as increases foreign currency inflow, which causes economic stability and prosperity.

Chinese outward FDI plays a huge role in developing global infrastructure. China has been investing a lot of capital in developing infrastructure especially along BRI countries. Pakistan is not just a partner in BRI, but one of the central participants in this initiative. The volume of investments in Pakistan within BRI is the largest. The share of Chinese FDI in Pakistan has crept upwards because 3000 km Chinese infrastructure network project was undertaken in Pakistan known as China-Pakistan Economic Corridor (CPEC) (China Daily, 2015). According to official Chinese statistics, in 2020, China invested US\$ 950 million in Pakistan (0.6% of total Chinese outward FDI). In 2020, accumulated Chinese FDI in Pakistan totaled US\$ 6.2 billion (0.2% of total accumulated Chinese FDI), which means that the construction of expensive infrastructure is financed by loans.

However, FDI also can carry a negative impact on the economy of the recipient country, becoming a source of risks and negative effects. The research written by Zhou Yun (2020), stated that with new foreign capital inflow and transnational companies' expansion, many domestic companies are not able to stand up against strong competition from multinational corporations. It causes stagnation of national production in certain industries (Yun, 2020). Chinese transnational companies can be dangerous to the national economy of recipient counties as they can use the competitive advantage to drive domestic companies out of business (Riikonen, 2019).

Many global scholars highlight that Chinese FDI causes environmental pollution. Analyzing the relationship between Chinese outward FDI and carbon dioxide (CO2) levels, the researchers found that Chinese enterprises increase the amount of CO2 emissions in recipient counties (Jun et al., 2018). Another group of scholars from China and Pakistan, based on empirical data has proven that Chinese FDI has a significant positive impact, while climate change and CO2 emissions have a negative impact on the agriculture in Pakistan (Ahmad et al., 2020). The research emphasizes that at the early development stage, FDI cannot come without ecological harm. For example, the FDI from the western countries to Japan at its early stage also polluted local environment. On the other hand, environmental pollution may be used as an element of Western policy to discredit Chinese global expansion.

On the other hand, Lun and Han (2021) argue that Chinese FDI comes with green technologies that bring innovation to recipient countries and provide positive environmental impacts (Lun & Han, 2021). It is necessary for any government to analyze, measure, and track



positive as well as negative effects of FDI. A well-designed national foreign investment strategy will help to build sustainable investment cooperation

DYNAMIC OF CHINESE OUTWARD FDI

Global foreign direct investment (FDI) collapsed in 2020, from \$1.5 trillion in 2019 to an estimated \$859 billion, according to UNCTAD. FDI in 2020 was 42% lower than the same indicator in 2019 (UNCTAD, 2021). The main reason behind such a steep fall was the global economic instability caused by the COVID-19 pandemic. According to the Ministry of Commerce of PRC, in 2020, China's cumulative outward FDI reached \$153.7 billion, which was a lower historical maximum value of 2016 (Ministry of Commerce of PRC, 2021).

After the launch of the Belt and Road Initiative (BRI) in 2013, Chinese outward FDI started to grow at a much faster pace. The BRI formed a central component of Xi's "Major Country Diplomacy" (大国外交) strategy, which raised China's leadership role in global affairs in accordance with its rising power and status (Smith, 2021; Stone et al., 2022). The initiative greatly supported an increase in outbound FDI flows from China until 2016. The purpose of BRI is to promote economic development and inter-regional connectivity come with Chinese capital.

Many economists conclude that BRI had some economic impact on the recipient countries, for example, the research published by X. Niu, through a study of 48 countries along "One belt one road", showed that China's outward FDI has significantly promoted the economic growth in recipient countries. Based on an economic model, the research found that every 1% increase in investment can cause GDP growth by 0.012% and contribute to technological innovation by 5.2% (Niu, 2021).

Since 2017, there has been a rapid decline in the volume of outward capital, mainly due to geopolitical tensions between China and EU and USA. Trade war and sanctions on Chinese technological section, limited the flow of Chinese outward FDI. At the same time Chinese government implemented strict control over capital exports due to a high number of fictitious investments and the yuan depreciation. The government introduced new regulations, which included additional approvals to transfer capital abroad and limit few sectors of real estate, entertainment, sports and others. According to the Ministry of Commerce of PRC, in 2020, the outward Chinese FDI grew by 12% to \$153.71 billion, however, it is still lower by 22% compared to 2016 historical pick volume (Ministry of Commerce of PRC, 2021).



China's outward foreign direct investment due to COVID-19 epidemic was undoubtedly affected. According to the research of Duan, Zhu, and Lai (2020) the outward FDI was negatively affected by the pandemic, however, Chinese economists conclude that the impact has short term and will not change the long-term situation of China's FDI (Duan et al., 2020). COVID-19 pandemic also reshaped industry of investment cooperation between certain counties. For example, in 2020, Chinese FDI in the Russian scientific and technical sectors showed a dramatic increase of about six times, compared to previous years (Ministry of Commerce of PRC, 2021). This significant increase of FDI in the Russian scientific and technical sectors was caused by revision of investment legislation in a number of developed countries that restricted or prohibited Chinese investments in the technological sector, however, Russian-Chinese investment cooperation still heavily based on natural resources.

Technological confrontation between western counties and China as well as trade sanctions influence the geographical transformation of Chinese outward FDI. According to China Global Investment Tracker, the share of Chinese FDI to Europe was 39% (of total Chinses FDI) in 2017, but compared to 2020, the volume of FDI to Europe decreased to 20%. The USA also had a significant decrease over the past four years. However, the share of Chinese investment in Asia, the Middle East, and Africa regions significantly increased.

The trade war between the US and China started in early 2018 when D.Trump's administration implemented new tariffs on solar panels and washing machines (Schlesinger & Ailworth, 2018). In a few months, the US government impose new tariffs on other imported goods. In April 2018, China responded by imposing tariffs on 128 products that it imports from the US (Koty, 2018). Both countries continue to impose new tariffs, introduce foreign technology restrictions, etc. The US-China trade war affected the deterioration of relations. Sanctions and restrictions on Chinese outward FDI were one main reason for the geographical shift of Chinese investments from the USA and EU countries to the Middle East, Africa, and Asia. It also affected the corporate strategy of many Chinese companies and investors.

Another reason that can explain the significant increase of Chinese FDI expansion in developing countries is that China no longer has the labor premium. With the existing demographic problem in China by 2050, the median age is expected to be 51, which makes the labor force very expensive and not very sufficient. Also, with growing Chinese GDP per capita, labor cost is also rising, and China is becoming not as labor cost-efficient as before. Therefore, Chinese investors are coming to other developing regions to find a more effective replacement for Chinese labor (Yu, 2021).



IMPACT OF CHINESE FDI ON PAKISTAN ECONOMY

China is the largest investor in the Pakistan economy. In past 10 years, China net FDI went over USD 8,4 billion and showed leading positions comparing with other countries. The research reviews the FDI trends in Pakistan in the last 10 years. (*See table 1 below*).

					years - country wise net FDI (US\$ Million)							
Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total Net
China	126.1	90.6	695.8	340.8	1,048.3	763.2	1,311.9	130.8	846.6	751.6	531.6	6637.3
UK	205.8	633.0	157.0	169.6	151.7	215.4	304.6	185.0	119.1	141.0	31.8	2314
USA	227.7	227.1	212.1	223.9	15.7	45.7	161.7	88.1	99.2	166.4	249.6	1717.2
Hong Kong (PRC)	80.3	242.6	228.5	136.2	187.0	123.0	183.6	171.0	190.7	157.2	137.7	1837.8
Switzerland	129.9	149.0	209.8	(6.5)	59.5	101.7	78.5	21.2	62.8	61.7	146.2	1013.8
U.A.E	36.8	22.5	(47.1)	235.3	114.6	120.1	(4.4)	103.7	(44.0)	115.7	143.9	797.1
Italy	200.1	199.4	97.6	115.4	105.4	61.5	56.6	51.9	57.4	36.3	34.8	1016.4
Netherlands	22.3	(118.7)	5.5	(34.5)	29.9	457.6	100.3	69.0	133.2	96.9	104.1	865.6
Austria	69.1	53.3	53.8	24.8	42.7	21.7	27.4	7.6	3.8	1.0	0.0	305.2
Japan	29.8	30.1	30.1	71.1	35.4	57.7	59.8	117.3	52.5	(13.0)	(12.3)	458.5
Turkey	3.3	0.5	7.9	43.4	16.9	135.6	29.8	73.8	26.1	13.4	(0.3)	350.4
Others	(310.5)	(73.0)	47.7	(285.7)	585.8	303.4	470.5	343.0	1,076.2	305.7	500.7	2963.8
Total	820.7	1,456.5	1,698.6	1,033.8	2,392.9	2,406.6	2,780.3	1,362.4	2,597.5	1,820.5	1,867.8	20,237.6

 Table 1. FDI trend for last 10 years - country wise net FDI (US\$ Million)

Source: Prime Minister Office, Board of Investment (2023)

Over the past 10 years of Sino-Pakistani investment cooperation, the Pakistan economy has been experiencing tremendous growth. Its GDP increased from US\$ 213 billion (2011) to US\$ 348 billion (2021). GDP per capita also showed a growth from US\$ 1075 (2011) to US\$ 1505 (2021). In 2019-2020, Pakistan's economy experienced a negative economic impact from the pandemic, however, it had a relatively quick recovery and showed positive growth in 2021 (The World Bank, 2022b).







Sources: 1. Created by the author, based on statistics from World Bank 2. Created by the author, based on statistics from Ministry of Commerce of PRC (American Enterprise Institute, 2023).

The research found that Pakistan GDP and accumulated Chinese FDI in Pakistan have correlation of 85%. This means that two variables are dependent on each other.

According to China Global Investment Tracker data, since 2005 China invested over US\$17.03 billion in Pakistan. The energy sector received around US\$12.92 billion (75% of total FDI) (American Enterprise Institute, 2023). The research also reviews the data from Chinese official statistics, which shows significant FDI flow in Pakistan's economy. (*See graph 2 below*).

Graph 2. Chinese FDI to Pakistan in million USD and accumulated distribution by industry (2012 - 2020)



Sources: 1. Created by the author, based on statistics from Ministry of Commerce of PRC (2021). 2. Created by the author, based on American Enterprise Institute (2023).

The sharp decrease of Chinese FDI to Pakistan in 2018 could be explained by political instability and tensions in bilateral relations during that time. In 2018, Pakistan expressed



dissatisfaction with the fact that it could not increase exports to China and insisted on revising the FTA agreement, therefore in 2020 the second phase of the FTA was signed and ratificated.

Pakistan is one of the first supporters and participants of the Chinese Belt and Road Initiative (BRI). BRI establishment caused a significant increase of Chinese investment in Pakistan, in 2014 China invested over US\$ 1 billion in one year (*See graph 2 above*). Chinese FDI under BRI transferred production facilities to Pakistan (energy projects, contraction material production, chemical production etc.), on one hand, it had a positive impact on the local economic development, but on the other hand, a lot of those facilities consist of polluting enterprises, which caused negative environmental effects. For example, the majority of the energy projects developed in Pakistan under BRI initiative were based on coal-based energy production, which is cheap, but heavily polluted to environment.

China Global Investment Tracker enabled the research to identify FDI flow that were invested into Pakistan purely under BRI. Since BRI establishment (2013-2022), China invested in Pakistan US\$14.8 billion, biggest share of those FDI went to energy sector. China invested into 17 energy related projects in Pakistan. Out of those energy projects, China invested into 8 projects related to coal energy, 5 alternative energy projects, 3 hydro-power projects, and 1 project related to natural gas (American Enterprise Institute, 2023). In the literature review, some scholars highlighted that Chinese outward FDI in coal-based energy production causes environmental pollution and increases carbon dioxide (CO_2) levels. Based on the data from the world Bank on the CO_2 emissions data, in 2013 Pakistan released 146,064 kt of CO_2 , the amount of CO_2 emissions in 2019 increased by 30% and amounted to 190,571 kt (The World Bank, 2022a).

In the past 10 years, Pakistan made great achievements in digital development, usage of internet among the population tripled from 8% of total population (2010) to 25% (2020) (The World Bank, 2022c). China investments in energy sector and the development of infrastructure have positive impact on Pakistan economy.

Under the CPEC China helps Pakistan to develop the necessary infrastructure and strengthen its economy through the construction of modern transport networks, numerous energy projects, and special economic zones (Kousar et al., 2018). For example, Haier has built and does not operate a large Industrial Park in Lahore (SEZ) with 2 million units per annum designed capacity to manufacture, assemble and produce high-end home appliances and electronics. After 21 years of development, Haier has become the largest home appliance brand in Pakistan (Haier Official website, 2023). Another example of the latest Chinese projects in Pakistan can be Huawei investment in 2019. Huawei invested \$100 million in Pakistan's



technical support center along with the regional headquarters in Islamabad. Huawei is the leading technological company that supports Pakistan in developing and upgrading of information technology (IT) sector of Pakistan (Shahid Khan, 2019).

Economic analysts have stated the tangible benefits of this initiative, including ending the severe energy shortage in Pakistan, which has limited economic growth (Ahmad, 2018). Positive impact on economic development from Chinese FDI under the CPEC can be shown in cotton textiles production. In 2017, China invested USD 2.7 billion in Xinjiang (China) (which connects China to Pakistan through CPEC) for cotton textiles production. This is a part of a larger vision of "Made in China 2025" which looks to expand China's value-added manufacturing exports (Lu, 2018). The main idea behind it is for China to import raw materials from Pakistan, add value in Xinjiang, after export finished products via Pakistan to the global market. However, considering the trade war between the US and China, many firms are also considering outsourcing production from China to South Asia. South Asia region has lower labor cost, and a relatively complete cotton supply chain affords Pakistan to create joint ventures (JVs) with Chinese partners. This would allow local producers to accumulate expertise and generate larger value-added products to be exported from Pakistan (The Pakistan Business Council, 2019).

DISCUSSION

This article explores the impact of Chinese foreign direct investment (FDI) on Pakistan's economy. Drawing data from various sources, including the World Bank and Chinese government records, the study employs correlation modeling and graphical methods to analyze this relationship.

While the research highlights positive economic effects of Chinese FDI, it also uncovers environmental concerns such as climate risks and increased CO2 emissions. To address these issues, the study recommends that Pakistan's local governments play a more active role in directing FDI towards eco-friendly projects and renewable energy initiatives.

The study's valuable contribution lies in the policy recommendations it provides. By guiding the distribution of foreign investments and promoting eco-friendly projects, these suggestions can help safeguard both the national economy and the environment of recipient countries. The limitations of this research include the reliance on correlation modeling, which may not account for all potential variables affecting the economic impact of Chinese FDI on



Pakistan, and the study's focus on a specific country's experience, which might not be fully generalizable to other nations.

In summary, this research delves into the complex dynamics between Chinese FDI and Pakistan's economy, emphasizing the need for strategic policies to maximize FDI benefits. The insights gained are relevant not only to Pakistan but also to other nations receiving foreign investments

CONCLUSION

The research hypothesis was confirmed. Based on the literature review of Chinese and foreign scholars as well as review of case studies and statistical analyses, the article concludes that Chinese accumulated FDIs has a positive impact on Pakistan's economy. The correlation model showed a positive relationship between accumulated FDI and GDP. Over the years, China and Pakistan created multiple instruments such as CPFTA and CPEC that support bilateral investment cooperation. BRI reflects a positive impact from Chinese investment in infrastructure and energy projects in Pakistan which leads to economic growth.

The research provides arguments that foreign investments could also bring a negative impact on recipient counties, such as environment pollution. The research strongly recommends to recipient countries to appropriately manage investment cooperation. The research recommends to the Pakistan government to build a well-designed strategy to manage outgoing as well as incoming foreign investment flows. Smart investment cooperation and the right usage of foreign capital will bring a "win-to-win" scenario to all parties and bring sustainable economic prosperity. The research recommends to the New Development Bank to monitor the FDI flows among BRICS countries, to develop projects and advise on the usage of funds in order to maximize positive and limit negative impacts.

REFERENCES

- Ahmad, M. (2018, September 19). Energy subsidies, efficiency must for growth. The News International. https://www.thenews.com.pk/print/370347-energy-subsidies-efficiencymust-for-growth
- Ahmad, S., Tariq, M., Hussain, T., Abbas, Q., Elham, H., Haider, L., & Li, X. (2020). Does Chinese FDI, climate change, and CO2 emissions stimulate agricultural productivity? An empirical evidence from Pakistan. Sustainability, 12(18), 7485. https://doi.org/10.3390/su12187485
- American Enterprise Institute. (2023). China global investment tracker. American Enterprise Institute, the Heritage Foundation. https://www.aei.org/china-global-investmenttracker/



- Bezdudnaya, A., Treyman, M., Ksenofontova, T., Pogoreltsev, A., & Smirnov, R. (2022). Forecast of development of regional water supply and sanitation systems considering environmental, economic, and social aspects as exemplified by Saint Petersburg. Revista Gestão & Tecnologia, 22(1), 76-92. doi:https://doi.org/10.20397/2177-6652/2022.v22i1.2345
- Cheung, K-Y., & Lin, P. (2004). Spillover effects of FDI on innovation in China: Evidence from the provincial data. China Economic Review, 15(1), 25-44. https://doi.org/10.1016/S1043-951X(03)00027-0
- China Daily. (2015, April 22). Backgrounder: China-Pakistan economic corridor. China Daily Information (CDIC). https://www.chinadaily.com.cn/world/2015xivisitpse/2015-04/22/content_20503693.htm
- Duan, W., Zhu, S., & Lai, M. (2020). The impact of COVID-19 on China's trade and outward FDI and related countermeasures. Journal of Chinese Economic and Business Studies, 18(4), 355-364. https://doi.org/10.1080/14765284.2020.1855395
- Haier Official website. (2023). Haier in Pakistan. https://www.haier.com/pk/about-haier/haier-pk/
- Helpman, E., Melitz, M., & Yeaple, S. R. (2003). Export versus FDI. NBER Working Paper Series No. 9439. National Bureau of Economic Research, Cambridge, MA. https://www.nber.org/system/files/working_papers/w9439/w9439.pdf
- Huang, Y., & Xie, L. (2020). 中国对外投资发展的历史回顾、最新形势和趋势展望 [Historical review, latest situation and trend outlook of China's outbound investment development]. Globalization, 5, 29-41. https://doi.org/10.16845/j.cnki.ccieeqqh.2020.05.003 (in Chinese)
- Jun, W., Zakaria, M., Shahzad, S. J. H., & Mahmood, H. (2018). Effect of FDI on pollution in China: New insights based on wavelet approach. Sustainability, 10(11), 3859. https://doi.org/10.3390/su10113859
- Kiseleva, I., Gasparian, M., Karmanov, M., & Kuznetsov, V. (2023). Methods of risk assessment and decision-making in investment projects amid economic instability. Revista Gestão & Tecnologia, 23(1), 57-68. doi:https://doi.org/10.20397/2177-6652/2023.v23i1.2536
- Koty, A. C. (2018, April 3). The US-China trade war: What US products are affected. China Briefing. https://www.china-briefing.com/news/us-china-trade-war-us-productsaffected/
- Kousar, S., Rehman, A., Zafar, M., Ali, K., & Nasir, N. (2018). China-Pakistan economic corridor: A gateway to sustainable economic development. International Journal of Social Economics, 45(6), 909-924. https://doi.org/10.1108/IJSE-02-2017-0059
- Lu, S. (2018). Outlook 2018: Apparel industry issues in the year ahead. FASH455 Global Apparel & Textile Trade and Sourcing. https://shenglufashion.com/2018/01/09/outlook-2018-apparel-industry-issues-in-theyear-ahead/
- Lun, X., & Han, Y. (2021). 中国对外直接投资有助于沿线国家绿色技术创新吗? [Can China's foreign direct investment help countries along the Belt and Road to innovate green technologies?]. School of Finance, Shanghai Lixin University of Accounting and

Finance.

https://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CAPJ&dbname=CAPJLAST&file name=KJJB20210903002&uniplatform=NZKPT&v=OXSjCvrZGd_I6Bx-2aj19KJLZUPCauquU0zzjuurlQec_tcmnn3VvxQmw3UJfz_0 (in Chinese)

- Mangi, F. (2022, September 2). China's funding to Pakistan stands at 30% of foreign debt. Bloomberg. https://www.bloomberg.com/news/articles/2022-09-02/china-s-fundingto-pakistan-stands-at-30-of-foreign-debt
- Ministry of Commerce of PRC. (2021). 2020年度中国对外直接投资统计公报 [2020 Statistical bulletin of China's outward direct investment]. http://hzs.mofcom.gov.cn/article/date/202110/20211003207274.shtml (in Chinese)
- Niu, X. (2021). 中国OFDI、技术创新与"一带一路"沿线国家经济增长研究 [Research on China's OFDI, technological innovation and economic growth of countries along the "Belt and Road"]. Times of Economy & Trade, 12, 75-78. https://doi.org/10.19463/j.cnki.sdjm.2021.12.016 (in Chinese)
- Petrina, O., Stadolin, M., Kovaleva, N., Morozov, V., Maslennikova, E., & Zemskova, A. (2023). El impacto del desarrollo turístico en la globalización de los mercados y la actividad económica. REICE: Revista Electrónica De Investigación En Ciencias Económicas, 10(20), 99–114. https://doi.org/10.5377/reice.v10i20.16029
- Prime Minister Office, Board of Investment. (2023). Statistics Foreign investment. Invest Pakistan. https://invest.gov.pk/statistics
- Ray, R., & Simmons, B. A. (2020, December 7). Tracking China's overseas development finance. Boston University Global Development Policy Center. https://www.bu.edu/gdp/2020/12/07/tracking-chinas-overseas-development-finance/
- Riikonen, A. (2019). Decide, disrupt, destroy: Information systems in great power competition with China. Strategic Studies Quarterly, 13(4), 122-145.
- Safiullin, M., Yelshin, L., & Sharifullin, M. (2023). Utilizing blockchain for sustainable development of international supply chains amid economic challenges. Revista Gestão & Tecnologia, 23, 243 - 259. doi:https://doi.org/10.20397/2177-6652/2023.v23i4.2717
- Schlesinger, J. M., & Ailworth, E. (2018, January 22). U.S. imposes new tariffs, ramping up 'America first' trade policy. Wall Street Journal. https://www.wsj.com/articles/u-simposes-trade-tariffs-signaling-tougher-line-on-china-1516658821
- Shah, S. (2016, April 10). Big Chinese-Pakistani project tries to overcome Jihadists, droughts and doubts. The Wall Street Journal. https://www.wsj.com/articles/big-chinese-pakistani-project-tries-to-overcome-jihadists-droughts-and-doubts-1460274228
- Shahid Khan, T. (2019, July 18). Huawei announces \$100m investment in Pakistan. Daily Ausaf. https://dailyausaf.com/en/pakistan/huawei-announces-100m-investment-inpakistan.html
- Smith, N. S. (2021). China's "Major Country Diplomacy": Legitimation and foreign policy change. Foreign Policy Analysis, 17(2), orab002, https://doi.org/10.1093/fpa/orab002
- Stone, R. W., Wang, Y., & Yu, S. (2022). Chinese power and the state-owned enterprise.InternationalOrganization,https://doi.org/10.1017/S0020818321000308
- The Pakistan Business Council, Consortium for Development Policy Research. (2019). China Pakistan free trade agreement phase 2: A preliminary analysis. https://cdpr.org.pk/wp-



content/uploads/2020/03/China-Pakistan-Free-Trade-Agreement-Phase-2-merged-final.pdf

- The State Council of the People's Republic of China. (2006). 更好地实施"走出去"战略 [The "going out" strategy implementation]. The Central People's Government of the People's Republic of China. http://www.gov.cn/node_11140/2006-03/15/content_227686.htm (in Chinese)
- The World Bank. (2018, March 29). Belt and road initiative. https://www.worldbank.org/en/topic/regional-integration/brief/belt-and-road-initiative
- The World Bank. (2022a). CO2 emissions Pakistan. World Bank Group. https://data.worldbank.org/indicator/EN.ATM.CO2E.KT?locations=PK
- The World Bank. (2022b). GDP (current US\$) Pakistan. World Bank Group. https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=PK
- The World Bank. (2022c). Individuals using the Internet (% of population) Pakistan. World Bank Group. https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=PK
- UNCTAD. (2016). Investment flows through offshore financial hubs declined but remain at high level. Global Investment Trends Monitor No. 23. https://unctad.org/system/files/official-document/webdiaeia2016d2_en.pdf
- UNCTAD. (2020). Global FDI flows flat in 2019 moderate increase expected in 2020. United Nations Conference on Trade and Development. https://unctad.org/news/global-investment-flows-flat-2019-moderate-increase-expected-2020
- UNCTAD. (2021). Global foreign direct investment fell by 42% in 2020, outlook remains weak. United Nations Conference on Trade and Development. https://unctad.org/news/global-foreign-direct-investment-fell-42-2020-outlook-remains-weak
- Yu, S. Z. (2021, April 2). Why substantial Chinese FDI is flowing into Africa. The London School of Economic and Political Science. https://blogs.lse.ac.uk/africaatlse/2021/04/02/why-substantial-chinese-fdi-is-flowinginto-africa-foreign-direct-investment/
- Yun, Z. (2020). 外商直接投资与中国经济增长的关系研究 [Research on the relationship between foreign direct investment and China's economic growth]. Fuzhou University. https://proxy.library.spbu.ru:6699/KCMS/detail/detail.aspx?dbcode=CMFD&dbname =CMFD201802&filename=1017050443.nh&uniplatform=OVERSEAS_CHS&v=aqD aEw0NPK-TPNS63bdUN63Lv55hyDbStkZwRNUR70fukHSIeTXBaxdYHhlm0nRZ (in Chinese)