



Assessing the Prospective Yield of Regional Trade in Sino-Pak Bloc, South Asia: Selected Manufacturing Sectors Analysis

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ABSTRACT

The study uses the Revealed Comparative Advantage method to assess Pakistan-China trade potential under the assigned FTA. For this purpose, secondary-level data was collected from UN-comrade from 2003-2018. Three major industries of the manufacturing sector (textile, food, leather) have been taken to check the effect of FTA on Pakistan-China trade. The results show that Pakistan has RCA in these three sectors, but still, its exports are lower than China; both Pakistan and China have the advantage of FTA, but China has more benefits. Because the effect of FTA is positive for China, Pakistan is enjoying very few benefits from these agreements.



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1. Introduction

The world trade between countries is an important element in increasing employment opportunities, providing consumers to enjoy different types of products, and raising their living standards. According to Kumar (2009) "trade is an activity in which people are buying and selling or exchanging the goods and services". Regional trade between countries is also a very useful tool in promoting economic growth. The most significant benefit of regional trade is a low transportation cost. Regional trade also increases bilateral trade between the countries of a region (Mouzam, 2020).

Now a day if we look towards developed countries industrial sector has played a very important role in their economic growth through trade. The industrial sector of Pakistan contributes 20% to the country's Gross Domestic Product (GDP). Manufacturing is the most important sub sector of the industrial sector having 65.0% share in the industrial sector and 13.6% in GDP (Nations, 2019). The manufacturing sector is very important for the employment generation of a country and also it increases the trade volume (Shripria, Srividya, & Thenmozhi, 2020).

In this study, we will discuss the Pakistan China trade in the manufacturing sector by taking 3 major industries of Pakistan (textile, food, and leather) and the effects of Free Trade Agreements (FTAs) on trade. Pakistan trade potential with China, as compare to other regional countries have been examined. For this purpose, the product-wise data of import and export of Pakistan with China of these industries have been taken from the UN Comtrade. Pakistan and China have a very friendly relationship for the last 2 decades. In recent years, China is raised as a huge economic state in front of world thrift. China's export rate has increased after connecting with the WTO (2001). This rise in China's economy affected all regional countries and their industries (Fu, Kaplinsky, & Zhang, 2009). The growth rate of china after joining WTO increased rapidly and at the same time world growth also increased significantly (Jadoon et al., 2023). Pakistan joined world trade organization (WTO) on 11 January 1995 and China on 11 December 2001 both are the member of WTO. Pakistan was following high tariff rates before joining WTO (Jadoon & Sarwar, 2020). China is an exporter of wood products, petroleum and coal products, chemical, metal products, auto parts, machinery and equipment, paddy rice, and other crops while Pakistan is the major exporter of plant-based fiber, textile, wearing apparel, vegetable oil, and fats, metal, leather, and chemical products to China. The Chinese industrial sectors depend on intermediate commodities, Foreign Direct Investment (FDI) inflows, and the export of raw material. Its export industries are surrounded by present local and international manufacturing systems (Fu et al., 2009). Similarly, according to Chong and Li (2019), China has converted the world's biggest trading country in commodities, ending the United States' post-war global trade dominance. In the international economy, China is emerging as the main player and sights FTAs as an important part of its global trading policy. Many researchers have examined the role of FTAs in the economic development (Naya & Plummer, 2006). According to the following worldwide reputation of China, on 24th November 2006, Pakistan and China signed an FTA, which came into progress in 2007. This agreement is comprised of two periods. In the first period, Pakistan has to reduced tariff on 6711 commodities and China have to decrease tariff on 6711 commodities for 5 years. The first period was completed in 2012 (Mukhtar & Hongdao, 2017). For the second phase of the FTA, the objective is to raise bilateral trade between the two countries to \$15 billion and to eliminate 90% tariff on all products. In 2003 the volume of bilateral trade is \$3,421.96 million after FTA which is increased to \$9,278 million at the end of 2013 (*Pakistan Business Council* 2015).

Both Pakistan and China have a quite similar export strategy that's why we choose particularly China to discuss the trade of both countries. China has already a powerful and rising economy and after the signing of the China Pakistan Economic Corridor (CPEC), benefits and revenues of Chinese Export will increase multiple-times (Magerman, Studnicka, & Van Hove, 2016). China and Pakistan both have the USA, UK, and Germany as a common target export market. Pakistan is also considered as destination market of China and vice versa (*UN COMTRADE*, 2016).

Pakistan's industrial sector is restricted to some limited products. Pakistan's exports mainly include the textile and agricultural sectors (Bari & Ejaz, 2012). However, Pakistan has an advantage in producing textile products but still faces fierce competition from China in international and local markets (Ahmad & Kalim, 2013; Akhtar, Zakir, & Ghani, 2008). The advantage of producing textile products is the low cost of labor. Similarly, China has also low-cost employers from villages. However, However, China is also working on a large supply of technology-related accessories (Weiss, 2005). Pakistani products are facing very tough

competition in the domestic and Chinese markets. Because Chinese products are cheap, though they are not durable, consumers prefer cheap products. Although Pakistan has a comparative advantage in the textile, food, and leather industries, it still faces a threat from China in the international market. CPEC is a great opportunity for Pakistan to increase its exports; for that purpose, Pakistan should adopt some policy measures. Pakistan can also take advantage of a US-China trade war where the US has imposed a high tariff on Chinese products. Pakistan can provide the US and China with products with a comparative advantage on low tariff rates because of the trade war between the US and China.

In the past few years, Pakistan's trade with China has increased in terms of imports and exports but more in terms of imports. Because of free trade agreements and other trade-related concessions, both countries benefit. This study examines Pakistan's trade potential with China. Pakistan's trade policies with China will be discussed, and how can we improve these policies to get the maximum benefit from the trade?

As we all know, China is Pakistan's major trading partner, and different agreements have been signed to improve trade between the two countries. In this study, we analyze the following aspects related to trade. Pakistan's industrial sector is restricted to some limited products. Pakistan's exports mainly include the textile and agricultural sectors (Bari & Ejaz, 2012). However, Pakistan has an advantage in producing textile products but still faces competition from China in international and local markets (Ahmad & Kalim, 2013; Akhtar et al., 2008). The advantage of producing textile products is the low cost of labor.

Similarly, China has also low-cost employers from villages. However, However, China is also working on a large supply of technology-related accessories (Weiss, 2005). Pakistani products are facing very tough competition in the domestic and Chinese markets. Because Chinese products are cheap, though they are not durable, consumers prefer cheap products. However, Pakistan has a comparative advantage in the textile, food, and leather industries, and Pakistan is still a threat to China in the international market. CPEC is a great opportunity for Pakistan to increase its exports; for that purpose, Pakistan should adopt some policy measures. Pakistan can also take advantage of a US-China trade war where the US has imposed a high tariff on Chinese products. Pakistan can provide the US and China with products with a comparative advantage on low tariff rates because of the trade war between the US and China.

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As we all know, China is Pakistan's major trading partner, and different agreements have been signed to improve the trade between the two countries. In this study, we analyze the following aspects related to trade. The present study has a number of objectives. The first objective of the study is to analyze the import-export trend of the manufacturing industry of Pakistan with China in the past sixteen years through product-wise data. Secondly, the present study has analyze trade agreements between the two countries and their effect on trade. Thirdly, the present study has analyzed increasing and decreasing trend of trade between China and Pakistan. Fourthly, the present study has also analyzed the competition of Chinese products with Pakistan products. Lastly the present study also explored how optimum benefits can be obtained from free trade agreement and how trade of Pakistan can be increased with China.

After the introduction, literature is reviewed in section 2, theoretical frame work is presented in section 3, methodology and data is presented in section 4, results are discussed in section 5 and conclusion and policies are presented in section 6 of the study.

2. Literature Review

International trade has been a very important practice in boosting economic activity in international economics. Hence, it has also attracted quite a lot of attention from both economists and the government. Regional and, specifically, bilateral trade is the most common manifestation of international trade. Pioneered by the European Union and inspired by its success, many regional trade blocks and covenants have sprung up in almost all parts of the world (Achakzai, 2006). Pakistan has participated in many such blocks and agreements, but they are all eclipsed by the Sino-Pak trade relations. Regarding Pakistan, China has become the most important partner due to the cordial relationship between the two countries. The trade volume has grown manifold after implementing the free-trade agreement in 2007. Although it has been elucidated that culture, language, business practices, proximity, and political situation, etc., play a critical role in multilateral and bilateral trade play a significant role. It seems, in the case of Sino-Pak Trade, all such differences have been ironed out by friendly relations and proximity of the two nations. Sino-Pak trade has experienced an upward swing since 2007, when trade volume jumped from US \$3.4 billion to US \$4.9 billion in a year only; this trend has almost continued since then with rare aberrations. Pakistan's share of imports and exports from China has steadily increased from 12% to 25% in imports and from 3.5% to 8.75% for the epoch spanning 2007 to 2015 (UN Comtrade statistics). However, this shows a clear winning position for China; other circumstances may explain this. At least FTA-2007 has been shown to play its part (Irshad, 2015b). Trade with China may be following the desired path as implied in the research work by Gul (2011) the author enumerated all countries with the potential to trade with Pakistan, and their extensive list lacks China. Nevertheless, they endorse the gravity model as most countries with bigger potential are nearer to Pakistan geographically. ASEAN member states have the largest trade potential as they are geographically closer to Pakistan but quite untapped in trade-related phenomena. Also, trade volume with SAARC members is not up to the mark, and there are obvious reasons for this anomaly (Gul, 2011). Research shows that the closer the two countries are, the greater the exchange of capital goods and, hence, the dissemination of advanced production methods with greater productivity. Trade agreements are important because of their divergent effect on trade for different regions and economies.

Aitken (1973) was the first to explicate the effect of trade agreements, and he showed that these kinds of agreements can expand trade, but these effects are ephemeral since trade shifts from non-member states to member states. To expand the trade horizon, economies must find innovative ways to trade produce and transport goods and services. Carrere (2006) studied eight free trade agreements and opined that trade agreements also create trade opportunities among member states; nevertheless, he did not refute the trade divergence from non-member to member states. However, this view is not undisputed. According to Barbalet, Greenville, Crook, Gretton, and Breunig (2015), non-members exported more to group members while imported less, and why this happened is still murky and needs more investigation. Abbas (2018) examined China's pattern for regional trade and the forecasts for Pakistan. China has gained more benefits in trade than Pakistan. Pakistan can benefit from this agreement by making its export goods more competitive and converting its trade deficit into a trade surplus (Shabir & Kazmi, 2007). Irshad (2015b) analyzed competence, visions, and clashes between Pakistan and China. Chaudhry, Jamil, and Chaudhry (2017) described the results of FTA and initiatives for CPEC. Firm-level data has been used to check the effects of FTA on productivity, size, and value-added of possibly affected Pakistani firms. CPEC also positively affects world trade because, through this project, world trade with China will be easier (Irshad, 2015a).

Ahmad and Malik (2017) exposed the regional impact of CPEC on South Asia. Ahmad and Malik (2017) examined Pakistan's China trade potential, the effect of a free trade agreement, and the future trade route. After the free trade agreement, trade between China and Pakistan increased. Pakistan's trade deficit has increased from \$104 million to \$12 billion, so trade favors China. So, for Pakistan, there is a need to plan its imports and exports and take proper measures

to expand its exports. After CPEC, Pakistan has many opportunities not only to improve its exports but also to improve the condition of the country. Pakistan is competent in agricultural products as compared to industrial products. Policymakers should revise the tax policy to make trade easier for both countries. CPEC will also promote tourism in the northern areas of Pakistan and provide safety and security (Ullah, Hafeez, Aziz, & Ahmad, 2018).

After examining all studies related to China-Pakistan trade, it is clear that both countries have very friendly relations that benefit their trade. Both countries have made bilateral trade agreements to get maximum benefit. Because of these trade agreements, trade between these two countries has been boosted. However, it has only benefited Pakistan as much as it proved for China. In the case of Pakistan, imports have increased much as compared to exports. Secondly, Pakistan is enjoying tariff concession less than the other ASEAN countries.

Moreover, China is not giving trade concessions to Pakistan in those products in which Pakistan has a comparative advantage. How can Pakistan increase and utilize its trade potential with China? For this purpose, this research is done.

In this research, trade potential will be analyzed for sixteen years in the case of Pakistan and China. This will be a guideline for the policymakers and the government of both economies related to trade policy. Not only may this, but the study also fulfills the research gap by comparing two emerging economies in this specific dimension.

2.1. Theoretical Foundation of Revealed Comparative Advantage

Many researchers have used a standard approach or methodology for the RCA index to estimate a country's comparative advantage or comparative disadvantage in commodities, industries, or sectors. Theoretically, we can measure comparative advantage based on relative prices when no trade exists. According to Ricardian theory, comparative advantage occurs due to technological differences between countries. In contrast, the H-O theory considers cost dissimilarities due to differences in factor prices between nations, assuming constant technology. Hence, we summarize that trade theories in the classical framework have built on the pre-trade relative price differences across nations. Although determining comparative advantage through H-O theory has numerous restrictions, primarily, the pre-trade relative price is incalculable Balassa and Noland (1989) Because of these complications, Balassa (1965) proposed that it is not compulsory to observe all elements disturbing the comparative advantage of any country. The Balassa Index serves as a gauge for evaluating a country's revealed comparative advantage in a specific industry or sector by comparing its export share in that sector to the global share of the sector in total exports. An index exceeding 1 signifies a comparative advantage, making it a valuable tool in international trade analysis to identify a country's specialization patterns.

3. Methodology and Source of Data

The Balassa (1965) of RCA defines a country's share in global exports of a commodity/product divided by its share of total global exports. First, we will estimate the RCA of three sub-sectors of Pakistan's manufacturing industry (food, leather, and textile) by dividing them by the overall export value of the manufacturing industry.

$$RCA_1 = X_{ij}/X_{in} \quad (1)$$

Where in RCA_1 , X_{ij} shows exports of country I (Pakistan) for j sector of the industry, n shows the total exports of manufacturing sector of Pakistan with China.

$$RCA_2 = X_{tj}/X_{tn} \quad (2)$$

In RCA_2 shows share of country t (china) exports with Pakistan in j sector divided by the overall share of the sector.

$$RCA_3 = (X_{ij}/X_{in}) / (X_{tj}/X_{tn}) \quad (3)$$

RCA_3 shows the comparison of Pakistan with one of the manufacturing industries of Pakistan divided by the RCA of China with Pakistan in the same sector. This is done with the other two sectors. For this purpose, annual data has been sourced from UNCOM-trade. The study also facilitates an understanding of the composition of goods traded between Pakistan and China. The outcomes will also help to determine if Pakistan has RCA for the same goods in its bilateral trade with China.

4. Results and Discussion

4.1. Results

In this paper we have analyzed the three sectors of Pakistan from 2003 to 2018. The RCA of Pakistan's export in comparison to china is presented in Table 1.

Table 1

RCA of Pakistan Exports in Comparison with China

Years	Leather	Food	Textile
2003	2.102512	0.02974	0.018056
2004	1.495101	0.005994	0.005405
2005	4.124963	0.006142	0.019993
2006	3.175195	0.098477	0.070697
2007	4.045761	0.154966	0.061944
2008	3.870914	0.197793	0.083592
2009	1.713994	0.082779	0.083619
2010	2.514191	0.104975	0.088495
2011	2.305585	0.153064	0.153438
2012	1.461305	0.051977	0.069709
2013	1.302356	0.046541	0.065139
2014	1.614834	0.020222	0.018371
2015	1.563745	0.015152	0.014105
2016	1.952431	0.040425	0.03007

Source: UN Comtrade

Table 1 reveals the comparative advantage of three major sectors of Pakistan's exports with China. Pakistan has a comparative advantage in leather with China. Food and textile are also major industries in Pakistan, but their RCAs are less than one, which shows that China has an advantage over Pakistan in these two sectors.

4.1.1. Manufacturing Sector of Pakistan

Exports play a vital role in enhancing the country's economic profile globally. In a broad picture of globalization, the significance of the manufacturing sector in any economy cannot be denied. The manufacturing sector's role has significantly increased Pakistan's GDP and export earnings. The share of the manufacturing sector of Pakistan's GDP is 13% and 78.23% in the total exports (Stromquist, 2019). According to the International Labor Organization, the share of manufacturing (industry) in employment is 19.8%. The manufacturing sector has seen many ups and downs during the last 72 years. However, during the last decade, the manufacturing sector-maintained momentum with an average growth rate of 7.3%. This is from both small and large manufacturing sector firms. In recent years, because of the poor domestic security and decrease in FDI, the financial outcome of this sector has been very low .

The manufacturing sector plays a vital role in increasing the economic growth of developing economies (UNIDO, 2016). Economic growth results from increased investment and manufacturing products (Schauer, 2017). Earlier studies have found that both degrees of industrialization and per capita income are correlated in growing economies. Because increased industrialization results in enhanced economic growth, people may have more employment opportunities with higher per capita income (Kaldor, 1968; Rodrik, 2009). The spillover effect of the manufacturing sector on economic growth has also been confirmed by the studies of Barbalet et al. (2015). Besides, it is evidenced that a significant share of the manufacturing sector (almost 20-35% of GDP) is crucial for the rapid growth of the economies. However, in growing economies like Pakistan, such a significant share of the manufacturing sector in GDP is rarely seen due to resource scarcity at the core of economic activity. However, several studies have highlighted that the situation can be improved by learning advanced techniques, adopting modern technologies for resource utilization, and investing rather than focusing on macro-level consumption patterns (Boucekkine, Del Rio, & Licandro, 2005).

The manufacturing sector of Pakistan consists of three sectors: small-scale manufacturing (SSM), Large-scale manufacturing (LSM), and Slaughtering. Small-scale manufacturing contributes only 2.0% to the GDP; large-scale manufacturing contributes 10.2%, and the third component, Slaughtering, has a 0.9% share of the GDP (Ministry of Finance, 2019). Large-scale manufacturing is a very powerful sector as it has a 10.2% share of GDP. Large-scale manufacturing comprises many sub-sectors. However, in this study, the author focuses on three major sub-sectors (textile, food, and leather) to check Pakistan's trade potential with China.

4.1.2. Textile Industry of Pakistan

The textile sector is very important in Pakistan's trade. According to the Ministry of Finance, Pakistan is the eighth largest exporter of textile products in Asia. It contributes 8.5% to the GDP and gives employment to 15 million people in the country. The world is earning US\$18 trillion annually and growing at 2.5%. Moreover, Pakistan's share is very low. Textile and clothing have been the main sectors of the economy in terms of employment and foreign earnings for the last 50 years. For the increment of employment and foreign earnings, no other sector of the economy has enough potential to benefit the economy. In this study, we explored the potential of various textile products, including silk, wool, cotton, carpets, other textile floor coverings, special woven fabrics, impregnated, coated, covered, or laminated textile fabrics, knitted and crocheted fabrics, articles of apparel, clothing accessories (both knitted and crocheted, as well as not knitted and crocheted), textile articles, worn clothing, worn textile articles, and vegetable textile fibers, among others. Although Pakistan is an agricultural country, its exports are lower compared to China. Many textile industry products are not included in the tariff concession list of the Free Trade Agreement (FTA). Additionally, the production of these items is lower, leading to higher imports from China compared to exports from Pakistan. The total imports and exports of textile industry of Pakistan with China are presented in Figure 1.

Pakistan's exports to China grew from \$613 million in 2007 to \$2.6 billion in 2012, showing a 327% growth. This means the FTA that both countries have signed positively impacted trade. However, despite no change in CPFTA (China-Pakistan Free Trade Agreement), Pakistan's exports were 39% from 2012 to 2016 (4th review of FTA by PBC). The above graph of textiles shows the same trend of imports and exports as predicted by PBC.

Textile exports have decreased over the last three years. Pakistan is likely to stay an important importer to supplement national production, though imports will likely decay to 2.4 million 480 lb. bales in response to enhanced manufacturing. According to a report by PBC (Pakistan Business Council) and CDPR (The Consortium for Development Policy Research), the improved product will be because of 'The PM Incentive Package for Exporters 2017-18', 'Extension of the PM Exporter Package 2018-21' and 'Federal Budgets (2016-2018)', which

includes incentives for exporters, subsidies for producers of textile products (selected) and tariff-free import of textile machinery, etc.

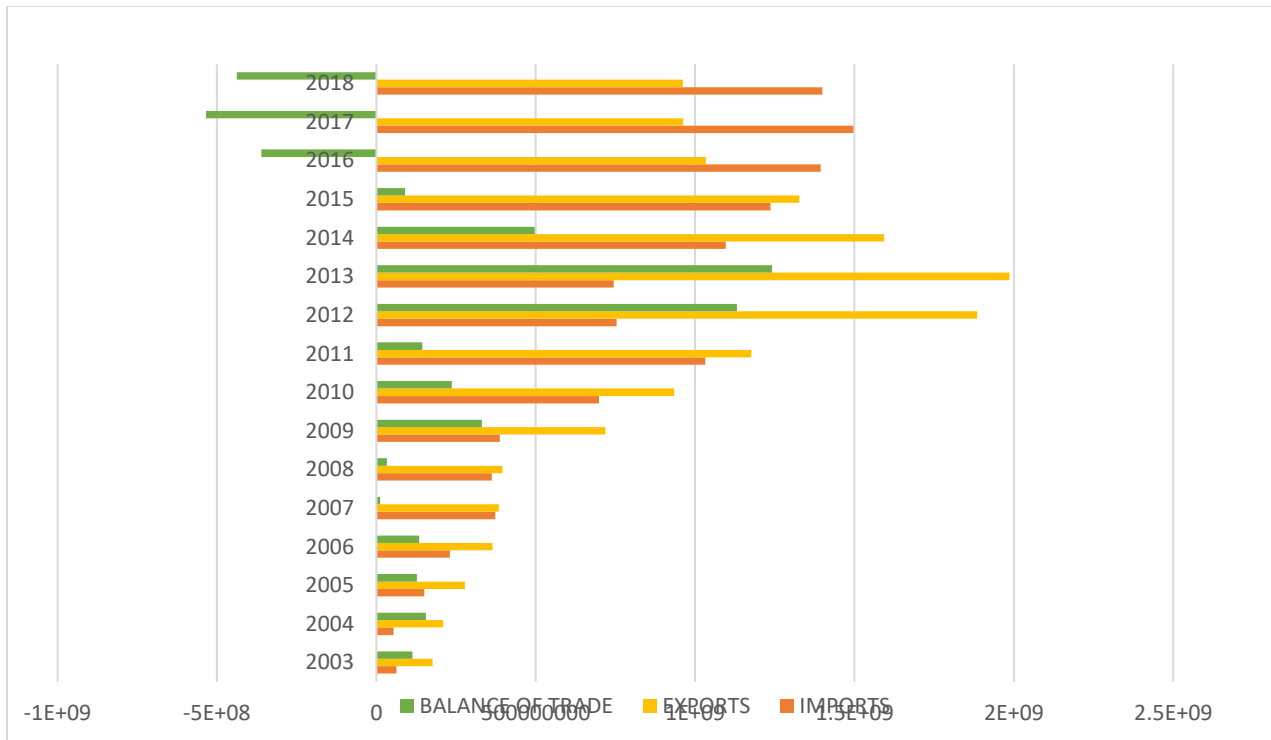


Figure 1: Total Imports and Exports of Textile Industry

From the above analysis of all manufacturing industry products, CPFTA has more advantages for China. Because those products that Pakistan can produce more are not on the tariff concession list compared to the other products in the tariff concession list with China, if these products are included on the tariff concession list, Pakistan can utilize its potential to trade with China.

President Trump announced a memorandum on 22 March 2018 to protect its trade from China. Around \$200 million worth of Chinese imports to the USA have to pay an additional tariff. The list comprises 5,745, of which 937 are from textile and apparel, and China contains 806 from 937 on which extra tariff is applied. Pakistan can export 189 out of the 806 that China faces additional tariffs. Pakistan can benefit from the US-China trade war if its production capability increases. Those goods face additional tariffs from the US to China. In this way, Pakistan can increase its trade potential.

4.1.3. Food Industry of Pakistan

According to a distinct expert, Pakistan's exports related to the food industry can increase its production three times more than the current production amount. Our country's cereal production is estimated at 26.3 million tons. A required food need of Pakistan to meet the current export challenge is 54 million tons from cereal production.

Due to its big canal system and vast water resources, Pakistan has massive potential to become a food granary for continents like Asia and Africa. Furthermore, Pakistan's climate and soil conditions are very suitable for heavy crop production. Our prior diet and protein-protein sources are vegetables, meat, fruits, cereals, etc. Wheat production this year was around 26 million tons with an additive 1.99% growth rate, and more than a million tons of rice were also exported to South Asian states. The government of Pakistan also signed many agreements on

food production and their trade with China. The total imports and exports of food industry of Pakistan with China are presented in Figure 2.



Figure 2: Total Imports and Exports of Food Industry

The above graph shows the combined trade of Preparations of vegetables, fruit, or nuts; preparations of cereals, flour, starch, or milk; pastry cooks' products; Preparations of meat of fish or crustaceans, mollusks or other aquatic invertebrates; residues and waste from the food industries and Miscellaneous edible preparations. The Food Industry has an increasingly negative trade balance, Reaching its peak in 2015 but still higher in 2018. It is because of Greater imports from China and the non-competence of Pakistan's exports in the open market.

4.1.4. Leather Industry of Pakistan

According to the Pakistan Institute of Trade and Development, the textile leather industry and its articles products are the country's second-largest export source. By updating the advancement and diversity of our product, especially footwear and garment-related goods, we can enhance the profit share of the leather market. Currently, the leather industry contributes USD 800 million/year. Further, we also export raw leather to other countries for an excessive amount. Using this extra raw and un-tanned leather, our products can be enlarged by acquiring proper strategies.

Apart from our product quality or volume, the main reliance on Pakistan's leather industry development is on tanners' struggles to enhance leather's promotional and market value. These steps, no doubt, enhance the selling prices of raw leather to other countries that are now 25% demanding export of leather articles and raw/wet blue hides/ skins materials. The total imports and exports of leather industry of Pakistan with China are presented in Figure 3.

After the Free Trade Agreement (FTA) signed in 2006, which came into effect in July 2007, new dimensions in bilateral trade were introduced, giving rise to trade (Ahmad & Malik, 2017). Pakistan's exports are greater than its imports in the leather industry. Pakistan's raw materials are major contributors to the leather industry's exports.

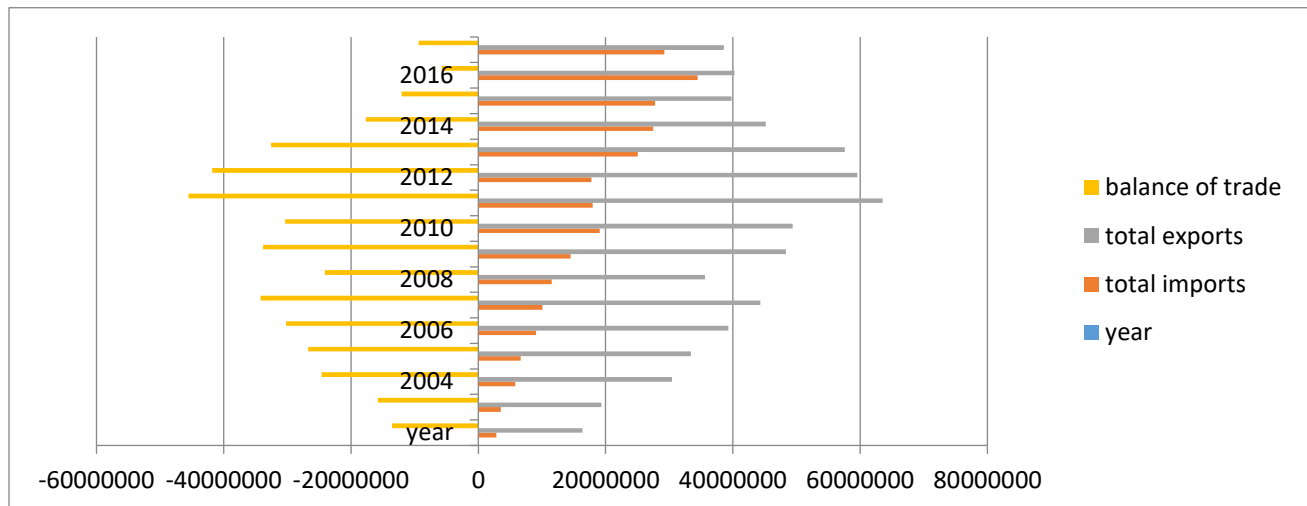


Figure 3: Total Imports and Exports of leather Industry

The reason behind fewer exports of Pakistan may be that the leather manufacturers in Pakistan failed to add value to product variation, thus mislaying its share in the global market and leaving an opportunity for regional contestants to offer their best. The inadequacy of technical staff and lack of modern infrastructure fueled the fire. Gas and electricity tariffs, trafficking of live animals to Afghanistan, and fewer government incentives are other considerable factors contributing to an intense failure in international demand for the country's leather products.

The appointment of child labor in different sectors of Pakistan's economy further distressed the industry. FIFA stopped the trade of leather sports products from Pakistan by employing children in its leather industry. Government officials remained obstinate on the feeble argument of employing small hands to finish the product design properly.

4.2. Discussions

China is developing very rapidly, and now, it is the second-largest economy in the world. One of the major reasons for this rapid growth is that trade with the world is growing very fast. For further trade development, China is signing free trade agreements with other countries. However, these free trade agreements benefit China more than other developing countries like Pakistan. Due to weak economic conditions, Pakistan cannot take full advantage of the offers given by China, but China can take advantage of these offers under CPFTA. However, China has given many concessions to Pakistan under CPFTA, like zero tariffs on some products and 20% on some products. But due to the many other reasons like low production, old production methods, etc. Pakistan needs to be in a position to utilize it fully. Firstly, for the items in which Pakistan has the expertise, the same or lower grant is given by China to its other FTA partner countries. Secondly, those products that Pakistan can export more are not included in CPFTA, and others are included in CPFTA. This is one of the major reasons for Pakistan's low exports to China. The trade deficit from Pakistan has increased significantly. However, after the FTA, China's Pakistan trade increased. In Chinese trade, Pakistan has a major part of its imports from China.

4.2.1. Trends of Pakistan & China Import-export & Free Trade Agreement

Textile is one of Pakistan's major industries in the manufacturing sector. It contributes a significant part to Pakistan's exports. China is importing a huge quantity of textile products from Pakistan, but China's exports to Pakistan are more than its imports. China's exports of artificial filaments are already high and are also included in the tariff concession list. Pakistan is exporting a huge quantity of carpets and other textile floor coverings, and on the other hand, Pakistan is

also importing a huge quantity of these products. This product is also not included in the tariff concession list of Pakistan and China, and there are many others. However, if those products in which Pakistan has comparative included in the tariff concession list of FTA with China, then exports of Pakistan can increase.

The second industry under discussion is Pakistan's food industry. Pakistan is an agricultural country, but its imports are still more than its exports. A few products of this industry are included in the tariff concession list of FTA. In the next phase of the FTA, Pakistan should suggest these products for tariff concession.

The third industry is Pakistan's leather industry. In this case, China is exporting more to Pakistan. Secondly, Pakistan exports raw materials to China and imports secondary items, which are more beneficial for China. In the leather industry, proper storage facilities are not available in Pakistan. Much raw skin and hides are wasted in Pakistan on Eid ul Azha, so proper storage facilities must be provided to avoid waste.

4.2.2.China's trade with Pakistan and other Regional Countries

China is not importing textile Products only from Pakistan but also from other regional countries like India, Bangladesh, Sri Lanka, Afghanistan, etc. In regional countries, India exports 2 million US\$ textile products to China, while Pakistan exports 1M US\$, almost half of the Indian exports to China.

In regional countries, India is a big trade partner of China. China imports 638K US\$ of vegetables from India and 175,000 US\$ of vegetables from Pakistan. However, the situation is now different because of the border dispute between the countries. If Pakistan enhances its exports, it gains an advantage from this conflict. Because of this war, if Pakistan provides these products to China, its trade can increase.

4.2.3.China-US Trade War

China is the second-largest economy in the world. Because of China's rapid growth, it is exporting many products to the world and the US. As a result, Chinese trade is dominating both the world and the USA, which is a threat to US trade. The US president imposed a heavy tariff on Chinese products to save its trade. On the other hand, China is trying to replace the US in trade. Now a day, this US-China trade war is common. Pakistan can take advantage of this trade war. According to the World Integrated Trade Solution, China imports 2M US\$ food products from the USA and 226,000 US\$ from Pakistan. Raw and hides imports from the US are 977,000 US\$, and imports of textile and clothing are 1,889,000 US\$. China imports many goods from the US in these three industries. Because of Pakistan's good relations with China, it can replace the US by providing these products at a low tariff.

4.2.4.Competitive Threat

The quality of Pakistani products is lower than that of Chinese products from other countries to compete in the Chinese market. Another reason is the need for advanced technology in Pakistan's manufacturing sector, like advanced machinery and storage of raw hides, skin, cotton, food, etc., at a high level. Pakistan is an agricultural country that exports massive amounts of cotton to China while also importing cotton from China. The reason behind this import is that, even though Pakistani cotton is hand-picked, there is no proper method to store it. It is subject to rain and dust as it remains under the open sky. Hence, Pakistan does not receive the actual value from the market. To solve the problem, Pakistan has to bring new and advanced technologies. Another major reason for the trade imbalance is Pakistani business people's need for more knowledge. Language is another hurdle for Pakistanis. However, in the second phase

of the FTA with China, Pakistan has to make a wise decision and include those products in the FTA in which Pakistan has a comparative advantage because many products in which Pakistan has comparative advantage is not included in tariff concession list of FTA.

Moreover, Pakistan should give proper guidelines to the business community for the finished goods to be exported to China. Pakistani government needs to protect its domestic industry from Chinese goods. Proper research is needed in this regard. From the above trends of the import-export data of the last 16 years, we can see that exports of Pakistan have not increased as much; only the exports of raw materials increased to some extent because we do not have much capacity to produce secondary well. Inadequate storage facilities for food, leather, and textile products, a lack of advanced technology resulting in lower production, reliance on importing primary goods rather than final products, and tariff concessions favoring Chinese products—these factors collectively pose a threat to Pakistani products. The competitive advantage enjoyed by Chinese goods due to these conditions may lead to a scenario where Chinese products, being more affordable, overshadow Pakistani counterparts, potentially jeopardizing the local manufacturing industry.

5. Conclusion and Policies

China-Pakistan Free Trade Agreement (CPFTA) should have boosted Pakistan's exports if we study the reports of *Pakistan's Ministry of Textile Industry 2008*). China offers Pakistan an edge over other countries, providing market access at zero duty for bed linen, cotton fabrics, other home textiles, sports goods, leather articles, fruits and vegetables, and other products. If we analyze the Sino-Pak bilateral trade data for the leather, textile, and food industries, we can conclude that Pakistan is facing a huge trade gap. According to PBC, the total trade deficit of Pakistan, out of this trade, for 2017 was about 13.88 billion USD.

Meanwhile, in the same year, China had a surplus of 16.42 billion USD out of this trade. China's imports from Pakistan, including the textile, leather, and food industries, have decreased by about 40 percent in the past five years. China's exports to Pakistan have increased by 132 percent. About 84 percent of Chinese products do not face hardships of tariffs from Pakistan because of the FTA (Council, 2019).

From this study of the food, textile, and leather industries, data discloses that the trend of exports has yet to demonstrate any substantial change. The total exports have amplified with little access to the Chinese market. The free trade agreements between China and Pakistan are more fruitful to China and the very opposite for Pakistan. All the exports of the leather industry are minimal as compared to imports. Cotton is the only good in the textile industry with a trade surplus. However, even that surplus is decreasing over time. In the case of the food industry, industrial food waste and meat preparations, etc., are only products with a positive balance of trade. It is because of the TRM (Tariff Reduction Modality) of China, some of the Pakistani products, which have comparatively larger export potential, are facing high tariff rates and are given no discount in China's offer list (Kamal & Malik, 2017; Mukhtar & Hongdao, 2017). For example, Pakistani dried fruits face a tariff rate of around 25 percent, semi-milled or milled rice/broken rice (65 percent), and men's or boys' cotton garments (16 percent). As against this, the items in which Pakistan has no competitive advantage were included in China's tariff elimination list. It is worth observing that though China's imports are increasing around the globe, there is no matching rise in imports from Pakistan.

Furthermore, the primary cause behind the diminished trade lies in elevated tariff rates and various factors such as the energy crisis, inflation, and limited-scale production. Despite often labeling CPEC as a transformative force for Pakistan, its potential impact can only be realized through effective utilization. For Pakistan to truly benefit, policymakers must craft pragmatic projections for the nation's future. Current trade data reveals that China exports \$10

billion annually, contrasting sharply with Pakistan's exports to China, which stand at less than \$2 billion yearly. Despite challenges such as low production, limited technology, energy crises, and insufficient research, Pakistan can boost its exports to China. For instance, if China grants concessions to Pakistan in products where it has a comparative advantage, export levels could rise. Additionally, prioritizing Pakistan over other regional countries for specific imports could further enhance its export potential.

5.1. Policies

As mentioned above Pakistan have a positive trade balance in terms of food waste which we exporting to China but this food waste can solve a major problem like energy shortage if we install refuse-derived fuel (RDF) plants in Pakistan. The energy produced from the RDF plants can be used in the textile industry and boosts its capacity for producing secondary goods. The key challenge for Pakistan lies in securing funds to establish these plants. Success depends on the government allocating funds for these projects, ensuring they are not marred by corruption, thereby paving the way for achieving this goal. Pakistan should try to seek preferential concessions in areas where the country has consistently performed well with the world, and where China also trades in with other countries. Under these circumstances, attention shall be paid on an equal level of tariff reductions on Pakistan's exports to China, as adored by its opponents from East Asian states on their goods and not the less. Pakistan needs to encourage private investors to invest in the industries by having negotiations with the business community keeping in view the CPFTA. A stable political environment in a country can significantly encourage private investors, making it imperative for the government to prioritize its development. Currently, Pakistani products are not of good quality as compared to those from China and other countries. Quality focused products must be approved by the government by introducing research and development.

Author's Contribution:

Sidra Sarwar Khan: Retrieved the data set, conducted data analysis, and write the draft.

Saima Liaqat: Given the idea of the study.

Munawar Iqbal: Retrieved the data set, conducted data analysis, and write the draft.

Muhammad Farhan Riaz: Revise, and approved the final version.

Conflict of Interests/Disclosures

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References

- Abbas, S. (2018). Free Trade Agreements and International Trade Flow of Pakistan: A Gravity Modelling Approach.
- Achakzai, J. K. (2006). Intra-ECO trade: a potential region for Pakistan's future trade. *The Pakistan Development Review*, 45(3), 425-437.
- Ahmad, N., & Kalim, R. (2013). Changing revealed comparative advantage of textile and clothing sector of Pakistan: Pre and post quota analysis.
- Ahmad, S., & Malik, A. H. (2017). China-Pakistan economic corridor: impact on regional stability of South Asia. *International Journal of Political Science and Development*, 5(6), 192-202. doi:<https://doi.org/10.14662/IJPSD2017.033>
- Aitken, N. D. (1973). The effect of the EEC and EFTA on European trade: A temporal cross-section analysis. *The American Economic Review*, 881-892.
- Akhtar, N., Zakir, N., & Ghani, E. (2008). Changing revealed comparative advantage: a case study of footwear industry of Pakistan. *The Pakistan Development Review*, 695-709.
- Balassa, B. (1965). Tariff protection in industrial countries: an evaluation. *Journal of Political Economy*, 73(6), 573-594. doi:<https://doi.org/10.1086/259085>

- Balassa, B., & Noland, M. (1989). "Revealed" Comparative Advantage in Japan and the United States. *Journal of International Economic Integration*, 8-22. doi:
- Barbalet, F., Greenville, J., Crook, W., Gretton, P., & Breunig, R. (2015). Exploring the links between bilateral and regional trade agreements and merchandise trade. *Asia & the Pacific Policy Studies*, 2(3), 467-484. doi:<https://doi.org/10.1002/app5.101>
- Bari, K., & Ejaz, L. (2012). Innovation Productivity and Competitiveness. A Case Study of Pakistan Textile Industry. *Interdisciplinary Journal of Contemporary Research in Business*, 3(9), 343-352.
- Boucekkine, R., Del Rio, F., & Licandro, O. (2005). Obsolescence and modernization in the growth process. *Journal of Development Economics*, 77(1), 153-171. doi:<https://doi.org/10.1016/j.jdeveco.2004.03.004>
- Carrere, C. (2006). Revisiting the effects of regional trade agreements on trade flows with proper specification of the gravity model. *European economic review*, 50(2), 223-247. doi:<https://doi.org/10.1016/j.euroecorev.2004.06.001>
- Chaudhry, T., Jamil, N., & Chaudhry, A. (2017). Pakistan's experience with the Pakistan-China FTA: Lessons for CPEC. *The Lahore Journal of Economics*, 22, 1-24.
- Chong, T. T. L., & Li, X. (2019). Understanding the China-US trade war: causes, economic impact, and the worst-case scenario. *Economic and Political Studies*, 7(2), 185-202. doi:<https://doi.org/10.1080/20954816.2019.1595328>
- Council, P. B. (2019). 5th Review of the China-Pakistan Free Trade Agreement with Recommendations for Phase II Negotiations. In: Karachi: Pakistan Business Council.
- Fu, X., Kaplinsky, R., & Zhang, J. (2009). The impact of China's exports on global manufactures prices.
- Gul, N. (2011). The Trade Potential of Pakistan: An Application of the Gravity Model Nazia Gul and Hafiz M. Yasin. *Lahore Journal of Economics*, 16(1), 23-62.
- Irshad, M. S. (2015a). One belt and one road: dose China-Pakistan economic corridor benefit for Pakistan's economy? *Journal of Economics and Sustainable Development*, 6(24).
- Irshad, M. S. (2015b). Pakistan-China free trade agreement (PCFTA) treaty model: Capability, prospects and disputes. *Academic Research International*, 6(3). doi:<https://doi.org/10.2139/ssrn.2690798>
- Jadoon, A. K., & Sarwar, A. (2020). Is Trade Liberalisation Pro-Poor in Pakistan? Evidence from Large-Scale Manufacturing. *Australian Economic Review*, 53(3), 360-394. doi:<https://doi.org/10.1111/1467-8462.12360>
- Jadoon, A. K., Sarwar, A., Javaid, M. F., Shoukat, A., Iqbal, M., Haq, Z. u., & Tariq, S. (2023). Estimating environmental efficiency of the selected Asian countries: does convergence exist? *Environmental Science and Pollution Research*, 30(19), 55024-55033. doi:<https://doi.org/10.1007/s11356-023-26221-z>
- Kaldor, N. (1968). Productivity and growth in manufacturing industry: a reply. *Economica*, 35(140), 385-391. doi:<https://doi.org/10.2307/2552347>
- Kamal, J., & Malik, M. H. (2017). Dynamics of Pakistan's trade balance with China. *SBP Staff Notes*, 4, 017.
- Kumar, P. S. (2009). India's international trade-merchandise trade and service trade performance. *Osmania Journal of International Business Studies*, 4(2), 124-139.
- Magerman, G., Studnicka, Z., & Van Hove, J. (2016). Distance and border effects in international trade: A comparison of estimation methods. *Economics*, 10(1), 20160018. doi:<https://doi.org/10.5018/economics-ejournal.ja.2016-18>
- Ministry of Finance. (2019). Retrieved from
- Mouzam, S. M. (2020). UNESCAP and UNCTAD, Asia-Pacific Trade and Investment Report 2019: Navigating Non-tariff Measures (NTMs) Towards Sustainable Development, United Nations Economic and Social Commission for Asia and the Pacific and United Nations Conference on Trade and Development. In: SAGE Publications Sage India: New Delhi, India.
- Mukhtar, H., & Hongdao, Q. (2017). A critical analysis of china-pakistan free trade agreement: Learning experiences for pakistan with respect to its future ftas. *Global Journal of Politics and Law Research*, 5(6), 63-74.

- Nations, T. (2019). *The Nation*. Retrieved from <https://www.nation.com.pk/>
- Naya, S. F., & Plummer, M. G. (2006). A quantitative survey of the economics of ASEAN-US free trade agreements. *ASEAN Economic Bulletin*, 230-252.
- Pakistan's Ministry of Textile Industry (2008). Retrieved from
- Pakistan Business Council (2015). Retrieved from
- Rodrik, D. (2009). *Growth after the Crisis*: Centre for Economic Policy Research London, UK.
- Schauer, M. J. (2017). Industrious Women and Lost Traditions: Gender, Imperial Exchange, and Handicrafts Education in British Malaya and the American Philippines, 1900–1940. *Journal of World History*, 28(3/4), 493-524.
- Shabir, S., & Kazmi, R. (2007). Economic effects of the recently signed Pak-China free trade agreement. *Lahore Journal of Economics*, 12(Special Edition), 174-202.
- Shripria, V., Srividya, V., & Thenmozhi, M. (2020). A Study on Bootstrapping Financing Methods Employed in Indian Small and Medium Scale Enterprises. *TEST Engineering and Management*, 83, 19243-19254.
- Stromquist, N. P. (2019). World Development Report 2019: The changing nature of work: By the World Bank. Washington, DC, World Bank, 2019, 151 pp. ISBN 978-1-4648-1342-9 (hbk). ISBN 978-1-4648-1328-3 (pbk), ISBN 978-1-4648-1356-6 (eBook), DOI: 10.1596/978-1-4648-1328-3. In: Springer.
- Ullah, S., Hafeez, M., Aziz, B., & Ahmad, H. (2018). Pakistan-China regional trade potentials in the light of CPEC. Available at SSRN 3182163. doi:<https://doi.org/10.2139/ssrn.3182163>
- UN COMTRADE. (2016). Retrieved from
- UNIDO. (2016). Retrieved from
- Weiss, J. (2005). *China's Competitive Threat to Latin America: An Analysis for 1990-2002*. Retrieved from
- WTO. (2001). *World Trade Organization* Retrieved from https://www.wto.org/english/res_e/res_e.htm