

# Yashil

IQTISODIYOT  
va  
TARAQQIYOT

Ijtimoiy, iqtisodiy, siyosiy, ilmiy, ommabop jurnal

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- 08.00.01 Iqtisodiyot nazariyasi
- 08.00.02 Makroiqtisodiyot
- 08.00.03 Sanoat iqtisodiyoti
- 08.00.04 Qishloq xo'jaligi iqtisodiyoti
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- 08.00.15 Tadbirkorlik va kichik biznes iqtisodiyoti
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- 08.00.17 Turizm va mehmonxona faoliyati



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# **Yashil** IQTISODIYOT va TARAQQIYOT

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# AN ANALYSIS OF THE STRUCTURE OF TRADE BETWEEN CHINA AND UZBEKISTAN

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**Abstract:** As a key hub of the Belt and Road Initiative and an important gateway from Asia to Europe, Uzbekistan is an important participant in the China-Central Asia Cooperation Mechanism, and China-Uzbekistan economic and trade cooperation is of increasing economic and strategic significance to the development of both countries. Under the Belt and Road Initiative and the New Uzbekistan Strategy, economic and trade relations between China and Uzbekistan have continued to take new leaps forward.

By comprehensively measuring Uzbekistan's import and export volume, growth rate, bilateral trade commodity structure, trade openness, export similarity index and Lawrence index, this paper concludes that both Uzbekistan and China have relatively high levels of trade openness, but Uzbekistan's economic development is more dependent on foreign trade. Bilateral trade between Uzbekistan and China has a greater impact on Uzbekistan than on China, while the commodity structure of Uzbekistan's exports to China is highly volatile, suggesting that Uzbek goods are relatively uncompetitive in the Chinese market. Uzbekistan's imports from China are much larger than its exports to China, and there is some risk that the trade deficit will widen year by year.

**Key words:** Uzbekistan-China bilateral trade; The structure of trade; Trade openness; Export similarity.

**Annotatsiya:** “Бир камил, бир ўй!” ташаббусининг асоси маркази ва Осиёдан Ўевропага мухим дарвоза сифатида О’zbekiston “Хитой-Марказија Осиё” хамкорлик механизминг мухим исhtirokchisi bo’lib, Xitoy-O’zbekiston iqtisodiy va savdo hamkorligi tobora ortib borayotgani har ikki davlatning rivojlanishi uchun iqtisodiy va strategik ahamiyatga ega. “Бир камил, бир ўй!” ташабbusi va “Yangi O’zbekiston” strategiyasi doirasida Xitoy va O’zbekiston o’tasidagi iqtisodiy va savdo munosabatlari yangi pog’onalarni egallashda davom etmoqda.

О’zbekistonning import va eksport hajmi, o’sish sur’ati, o’zaro tovar ayriboshlash tuzilmasi, savdo ochiqligi, eksport o’xshashlik indeksi va Lorens indeksini har tomonlama o’lchab, ushbu maqola ham O’zbekiston, ham Xitoy savdo ochiqligining nisbatan yuqori darajasiga ega ekanligini tahlil qiladi. O’zbekistonning iqtisodiy rivojlanishi ko’proq ana shu tashqi savdo bo'yicha hamkorliklarga bog'liq, degan xulosaga keladi. O’zbekiston va Xitoy o’tasidagi o’zaro savdo O’zbekistonga Xitoya qaraganda ko’proq ta’sir ko’rsatadi, shu bilan birga, O’zbekistonning Xitoya eksportining tovar strukturasi o’ta o’zgaruvchanligi o’zbek tovarlari Xitoy bozorida nisbatan raqobatbardosh emasligini ko’rsatadi. O’zbekistonning Xitoydan importi Xitoya eksportidan ancha ko’p va savdo taqchilligi yildan-yilga kengayib borishi xavfi bor, degan qarashni ilgari suradi.

**Kalit so’zlar:** O’zbekiston-Xitoy o’zaro savdosi; Savdo tuzilishi; Savdoning ochiqligi; Eksport o’xshashligi.

**Аннотация:** Будучи главным центром инициативы “Один пояс, один путь” и важными воротами из Азии в Европу, Узбекистан является важным участником механизма сотрудничества “Китай-Центральная Азия”, а также растущего экономического и торгового сотрудничества между Китаем и Узбекистана. Имеет экономическое и стратегическое значение для развития двух стран. В рамках инициативы “Один пояс, один путь” и стратегии “Новый Узбекистан” экономические и торговые отношения между Китаем и Узбекистаном продолжают достигать новых высот.

Путем всестороннего измерения объема импорта и экспорта Узбекистана, темпов роста, структуры торговли, открытости торговли, индекса сходства экспорта и индекса Лоуренса, в данной статье анализируется торговая открытость как Узбекистана, так и Китая. Анализируется, что она имеет относительно высокий уровень. Сделан вывод, что экономическое развитие Узбекистана в большей степени зависит от этого внешнеторгового сотрудничества. Взаимная торговля между Узбекистаном и Китаем затрагивает Узбекистан больше, чем Китай, а весьма изменчивая товарная структура экспорта Узбекистана в Китай указывает на то, что узбекские товары относительно неконкурентоспособны на китайском рынке. Импорт Узбекистана из Китая намного превышает его экспорт в Китай, и торговый дефицит, вероятно, будет увеличиваться из года в год.

**Ключевые слова:** узбекско-китайская взаимная торговля; Торговая структура; Открытость торговли; Экспортная аналогия.



## 1. INTRODUCTION

Since the establishment of diplomatic relations between Uzbekistan and China in 1992, economic and trade cooperation between the two countries has progressed and the volume of bilateral trade has continued to increase. Under the continuous promotion of "the Belt and Road Initiative", the bilateral relations between Uzbekistan and China are constantly moving to a new level. As an important hub of the Belt and Road Initiative and an important gateway from Asia to Europe, Uzbekistan has great geographical advantages and a stable domestic situation, which provide a solid foundation for the development of economic and trade cooperation between Uzbekistan and China. How to make full use of the comparative advantages of Uzbekistan and China, expand the scale of bilateral trade, promote the trade balance between the two countries and optimise the trade structure of the two countries has become an important practical issue.

## 2. REVIEW OF RESEARCH

In January 1992, China and Uzbekistan formally established diplomatic relations and signed the Economic and Trade Agreement between the Governments of China and Uzbekistan, in which the two countries mutually recognized the granting of most-favoured-nation status to each other in trade[1]. Over the past 30 years since the establishment of diplomatic relations, bilateral ties have flourished, achieved fruitful results in the joint construction of the Belt and Road and the Shanghai Cooperation Organisation (SCO), further deepened strategic mutual trust, expanded mutually beneficial cooperation and comprehensively promoted intergenerational friendship, thus elevating China-Uzbekistan relations to a new level of comprehensive strategic partnership. China has become one of the most important trading partners and source countries of investment for Uzbekistan, with bilateral trade volume reaching a record high. Chinese technologies and standards have given new impetus to the long-term development of the Uzbekistan economy.

The two countries signed important documents on expanding trade, economic, financial and investment cooperation and the establishment of an intergovernmental commission on this issue, the establishment of technical and economic cooperation on the avoidance of double taxation and mutual assistance in customs matters[2].

China is one of the countries that invests the most in the economy of Uzbekistan. On the basis of preferential and commercial loans of the Chinese government, more than 60 large projects were implemented in Uzbekistan[3]. Begaliev[4] discussed the long-term mutually beneficial relations between Uzbekistan and China. Dadabaev[5] discussed the impact of Chinese engagement in Uzbekistan. Rashidova[6] investigated the history of formation and development of Uzbek-Chinese relations in the economic sphere. There are more articles that qualitatively analyze Uzbekistan-China relations, but fewer analyze the structure of bilateral trade between Uzbekistan and China.

## 3. RESEARCH METHODS

In order to promote trade cooperation between China and Uzbekistan, optimise the trade structure, and understand the direction of cooperation and the trade potential of the products of the two countries, statistical analysis tools and methods are used to conduct a comprehensive analysis of the import and export trade situation between Uzbekistan and China, to measure the degree of trade dependence, the degree of trade openness, the export similarity index and the Lawrence index, to sort out the characteristics of bilateral trade between Uzbekistan and China and the changes in the structure of commodities, and to provide the governments of the two countries with a reference for deepening bilateral economic and trade cooperation.

## 4. ANALYSIS AND DISCUSSION

### 4.1 General situation of trade between China and Uzbekistan

Over the past 30 years since the establishment of diplomatic relations, the scale of trade between China and Uzbekistan has expanded rapidly, with bilateral trade increasing 140 times. In 2022, bilateral trade amounted to \$8.92 billion, up 19.7 per cent year on year, accounting for 17.8 per cent of Uzbekistan's total foreign trade. Among them, Chinese exports amounted to \$6.4 billion, up 30 per cent year-on-year, while Chinese imports amounted to \$2.52 billion, down 0.4 per cent year-on-year. China is Uzbekistan's first largest source of imports and second largest export destination.

Using the UN Comtrade database, with China as the reporter and Uzbekistan as the partner, the development of bilateral trade between Uzbekistan and China for the period 2003–2022 was compiled, as shown in Table 1.

**Table 1:** Changes in Uzbekistan's import and export volumes with China, 2003–2022

Years	Value Of Import		Value Of Export		Value Of Import and Export		Trade Surplus
	Value (billions of dollars)	Growth rate (%)	Value (billions of dollars)	Growth rate (%)	Value (billions of dollars)	Growth rate (%)	
2004	1.72	33.72%	4.03	11.66%	5.75	65.71%	2.31
2005	2.30	76.52%	4.50	25.78%	6.8	18.26%	2.2
2006	4.06	88.42%	5.66	-35.87%	9.72	42.94%	1.6
2007	7.65	67.06%	3.63	-9.37%	11.28	16.05%	-4.02
2008	12.78	22.14%	3.29	6.08%	16.07	42.46%	-9.49
2009	15.61	-24.34%	3.49	272.78%	19.1	18.86%	-12.12
2010	11.81	15.07%	13.01	-37.97%	24.82	29.95%	1.2
2011	13.59	31.20%	8.07	35.32%	21.66	-12.73%	-5.52
2012	17.83	46.55%	10.92	77.47%	28.75	32.73%	-6.91
2013	26.13	2.49%	19.38	-17.54%	45.51	58.30%	-6.75
2014	26.78	-16.77%	15.98	-20.71%	42.76	-6.04%	-10.8
2015	22.29	-9.96%	12.67	26.84%	34.96	-18.24%	-9.62
2016	20.07	36.97%	16.07	-8.46%	36.14	3.38%	-4
2017	27.49	43.51%	14.71	2.18%	42.2	16.77%	-12.78
2018	39.45	27.55%	15.03	57.42%	54.48	29.10%	-24.42
2019	50.32	2.13%	23.66	-31.57%	73.98	35.79%	-26.66
2020	51.39	14.46%	16.19	-4.82%	67.58	-8.65%	-35.2
2021	58.82	27.58%	15.41	47.70%	74.23	9.84%	-43.41
2022	75.04	17.01%	22.76	101.50%	97.8	31.75%	-52.28

Source: UN Comtrade database

As can be seen from the data in the table, in 2003 the total trade between Uzbekistan and China was only \$347 million, China imported \$200 million from Uzbekistan, exported \$147 million to Uzbekistan, and Uzbekistan's net export to China was \$53 million. By 2022, the volume of bilateral trade between Uzbekistan and China will have reached \$9.78 billion, with Uzbekistan exporting \$2.276 billion to China, Uzbekistan importing \$7.504 billion from China, and Uzbekistan's net export to China being -\$5.228 billion. The volume of bilateral trade in 2022 will have increased 27 times compared to 2003, with an average annual growth rate of 19.21 percent. The volume of Uzbekistan's import trade with China increased 50 times, realizing an average annual growth rate of 23.00%. The volume of Uzbekistan's export trade with China has increased 10 times, realizing an average annual growth rate of 13.65%.

**Figure 1:** Import and export trade of Uzbekistan with China, 2003 - 2022

Source: UN Comtrade database



As can be seen from Figure 1, Uzbekistan's imports, exports and total imports and exports to China show an overall increasing trend, except for a small decline in 2014 and 2015. Before 2007, Uzbekistan's trade with China showed an overall surplus, and after 2007, Uzbekistan's trade with China showed an overall deficit, and the deficit is growing rapidly.

The growth rate of trade is a direct reflection of the characteristics of changes in trade, and since 2003 the growth rate of trade between Uzbekistan and China has shown some fluctuation. This is shown in Figure 2.

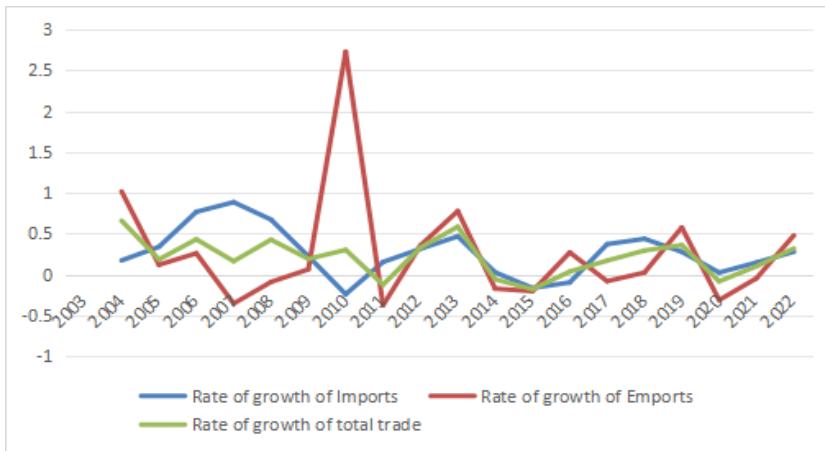


Figure 2: Changes in the growth rate of Uzbekistan's import and export trade with China, 2003–2022

Source: UN Comtrade database

As shown in Figure 2, The growth rate of imports from China is more volatile. It has been increasing year on year since 2004. After peaking in 2007, it fell sharply in 2008, 2009 and 2010. It then recovered, but there was another significant fall in 2014 and 2015, followed by steady growth and, after a small dip due to the epidemic in 2020, a rapid growth trend.

The growth rate of exports from Uzbekistan to China varies considerably and was as high as 272.78% in 2010. In 2007, the growth rate of exports from Uzbekistan to China declined significantly, but Uzbekistan's imports from China showed a growing trend, and in 2011 and 2020, the growth rate of exports from Uzbekistan to China also declined significantly.

The growth rate of total trade between Uzbekistan and China is influenced by the growth rates of both imports and exports, with less fluctuation overall. The growth rates of total trade for imports and exports in 2013 and 2019 are 58.30% and 35.79% respectively, indicating that Uzbekistan and China are experiencing faster trade growth in these years.

#### 4.2 Uzbekistan's trade dependence with China

Trade between Uzbekistan and China has been growing, while China's trade with Uzbekistan as a percentage of China's imports has remained small and almost unchanged due to the fact that China's economic and production capacity is much larger than that of Uzbekistan.



Figure 3: Changes in the share of China-Uzbekistan imports and exports in China-Uzbekistan trade, 2003–2022

Source: UN Comtrade database



From China: in the time period from 2003 to 2022. Uzbekistan's imports from China as a percentage of China's total exports remained between 0.03% and 0.21%, indicating that Uzbekistan's market is relatively small, contributes less to China's export commodities and does not have a significant impact on China's total exports.

Uzbekistan's exports to China as a percentage of China's total imports remain between 0.03% and 0.11%, indicating that the scale of Uzbekistan's exports to China's total imports is also relatively small, and that China's import market's dependence on Uzbekistan's exports of goods is very low and does not have a significant impact on China's total imports.

The share of total Uzbekistan-China trade in China's total foreign trade remains between 0.04% and 0.16%, indicating that Uzbekistan's trade with China is relatively small and has a limited impact on China's total foreign trade.

From the perspective of Uzbekistan: The share of imports from China in Uzbekistan's total imports ranges from 5.06% to 24.39% in the period from 2003 to 2022. This indicates a gradual increase in the share of imports from China, making China one of the most important sources of imports for Uzbekistan.

The share of exports to China in Uzbekistan's total exports ranges from 5.38% to 13.55%, indicating that China is one of the most important markets for Uzbekistan's merchandise exports.

The share of total Uzbekistan-China trade in Uzbekistan's total foreign trade ranges from 5.24% to 19.54%, showing year-on-year growth and increasing importance for Uzbekistan's economic development, indicating that China has become one of Uzbekistan's most important trading partners.

#### 4.3 Trade openness of Uzbekistan and China

Trade openness is usually expressed as the ratio of a country's total foreign trade in a given year to its gross domestic product (GDP) in the same year. The formula is as in (1):

$$I_{\text{to}}^{\text{a}} = \frac{M_{\text{a}} + X_{\text{a}}}{\text{GDP}_{\text{a}}} \quad (1)$$

In the formula:  $I_{\text{to}}^{\text{a}}$  is country's trade openness index,  $M_{\text{a}}$  is the value of country's imports from the world in a given year.  $X_{\text{a}}$  is the value of country  $\text{a}$ 's global exports in a given year. The sum of the two represents the total trade of country  $\text{a}$  in a given year.  $\text{GDP}_{\text{a}}$  is the GDP of country  $\text{a}$  in a given year. The greater the trade openness and the higher the share of international trade in a country's economic production activities, the deeper the country's participation in international trade, the greater its dependence on international markets and the more open its trade environment and policies.

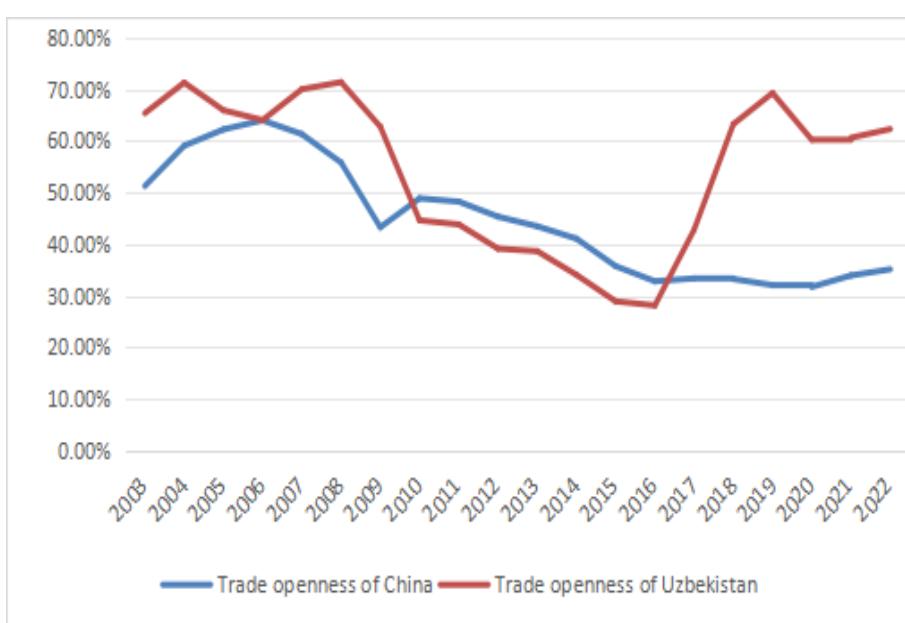


Figure 4: Trend in trade openness between Uzbekistan and China, 2003–2022

Source: UN Comtrade database

As shown in Figure 4, Uzbekistan's trade openness generally shows a downward and then an upward trend. China's trade openness generally shows a decreasing trend. Uzbekistan's trade openness is higher than China's trade openness in both the periods 2003–2009 and 2017–2022. In the period 2010–2016, China's trade openness is higher than Uzbekistan's.



Overall, despite some fluctuations, both China and Uzbekistan have maintained relatively open trade policies, and both countries have a high degree of openness to foreign trade. However, Uzbekistan's economic development is more dependent on foreign trade, and its reliance on imports of key products and technologies may put it at a disadvantage in international competition, making it vulnerable to factors such as supply disruptions, price fluctuations or quality problems, and increasing economic risks. At the same time, large trade deficits in recent years have required borrowing from other countries or the use of foreign exchange reserves to pay for the difference in imported goods and services, and a prolonged trade imbalance can lead to economic instability and debt accumulation.

#### 4.4 Current status of the trade structure between Uzbekistan and China

The natural and human resource endowments of different countries, as well as the total economic volume, industrial scale and foreign trade policy to determine its import and export commodity structure. Developed countries tend to export capital and technology-intensive products, while developing countries tend to export resource- and labour-intensive products. The structure of trade between Uzbekistan and China has also changed significantly over the last two decades. Uzbekistan's exports to China in 2022 are shown in Figure 5.

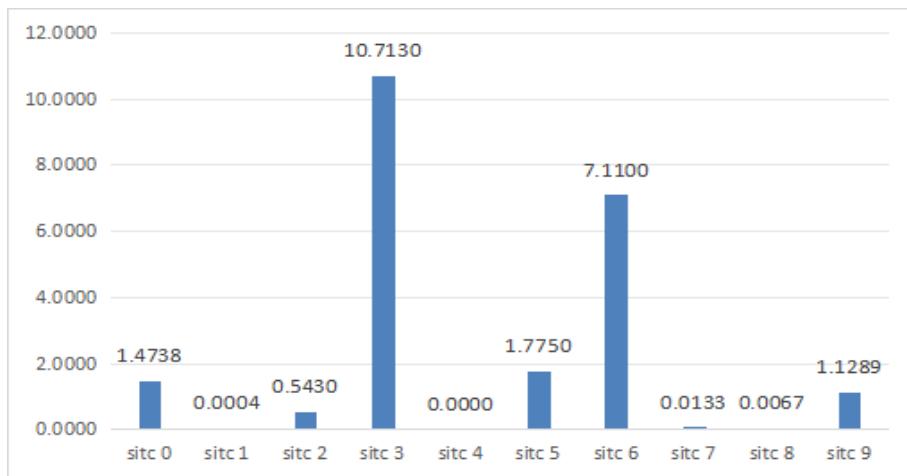


Figure 5: Uzbekistan's exports to China by commodity group in 2022

Source: UN Comtrade database

The highest export value was SITC 3 (Mineral fuels, lubricants, and related materials), amounting to \$1.071 billion, or 47.06%; In second place is SITC 6 (Manufactured goods) with \$711 million or 31.23%; The third is SITC 5 (Chemicals and related products), with an amount of \$178 million, or 7.8%; In fourth place was SITC 0 (Food and live animals) with \$147 million or 6.47%; Fifth is SITC 9 (Commodities not elsewhere specified) with \$113 million or 4.96%. The rest of the commodities are smaller in amount. A comparison of Uzbekistan's exports of goods to China over the period 2003–2022 is shown in Figure 6.

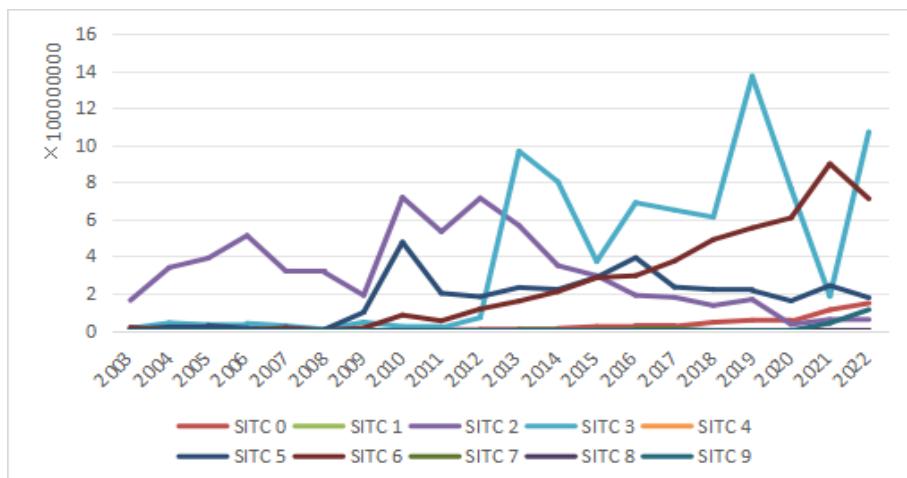


Figure 6: Changes in Uzbekistan's exports of commodities to China, 2003–2022

Source: UN Comtrade database



From the graph, it can be seen that the change of Uzbekistan's export goods to China is quite significant, before 2013, the highest export value is SITC 2 (Crude materials, excluding fuels), and then the share of this category of goods has been decreasing. SITC 3 (Mineral fuels, lubricants and related materials) has increased significantly since 2013, and has basically stabilised in the first place. SITC 6 (Manufactured goods) has always been on a growing trend, and has basically stabilised in the second place after 2017. SITC 5 (Chemicals and related products) has less fluctuation overall, and the export scale is relatively stable. Uzbekistan's imports from China in 2022 are shown in Figure 7.

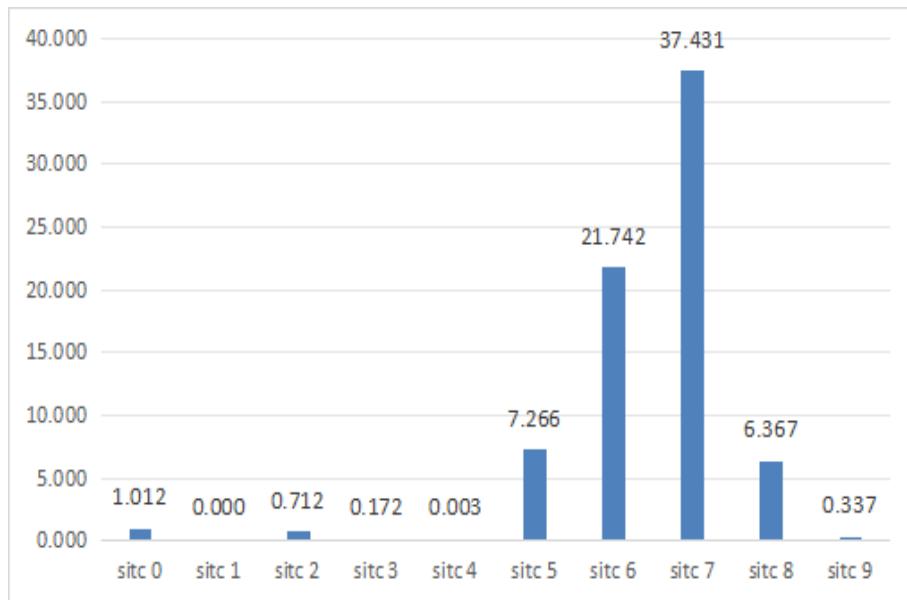


Figure 7: Uzbekistan's Imports from China by Commodity Category, 2022

Source: UN Comtrade database

The highest import value was SITC 7 (Machinery and transportation equipment), amounting to \$3.743 billion, or 49.88%; In second place is SITC 6 (Manufactured goods) with \$2.174 billion or 28.97%; The third is SITC 5 (Chemicals and related products), with an amount of \$727 million, or 9.68%; In fourth place is SITC 8 (Miscellaneous manufactured articles), with an amount of \$637 million, or 8.48%; Fifth is SITC 0 (Food and live animals) with \$101 million or 1.35%. The rest of the commodities are smaller in amount.

Compare the changes in Uzbekistan's imports of goods from China over the period 2003–2022, as shown in Figure 8.

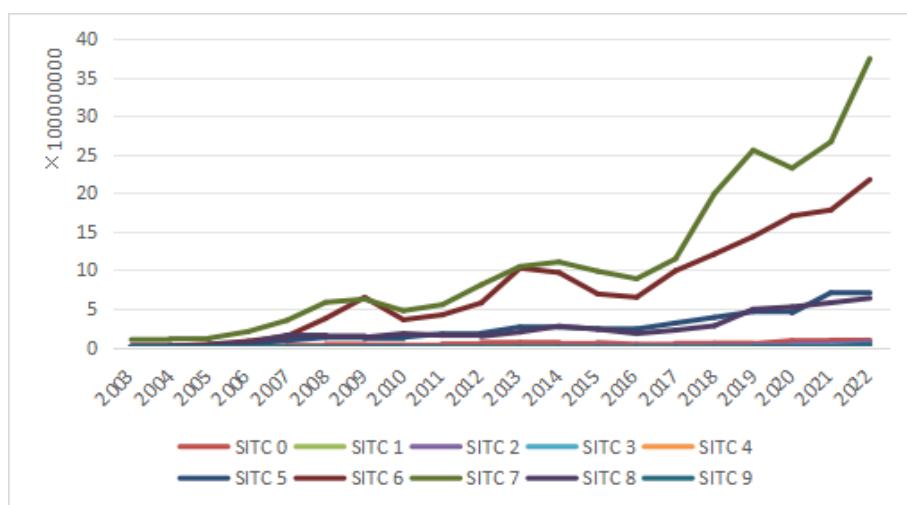


Figure 8: Changes in Uzbekistan's imports from China, 2003–2022

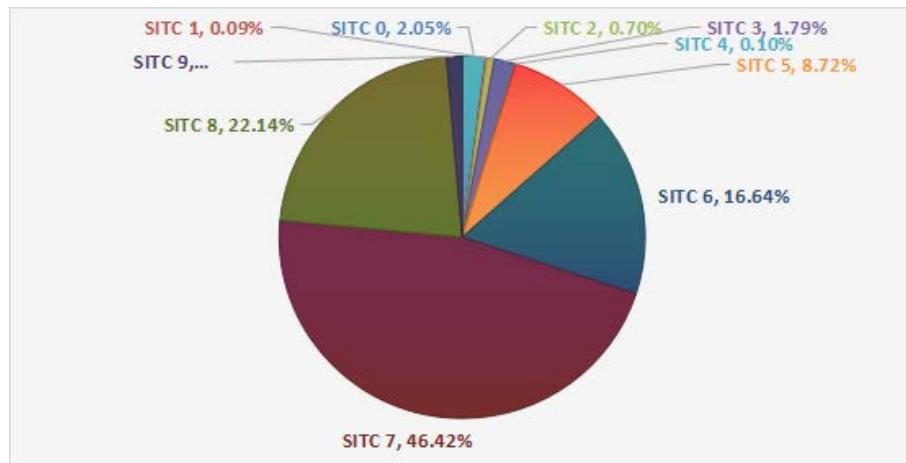
Source: UN Comtrade database

Uzbekistan's imports of SITC 7 and SITC 6 from China are growing at the fastest rate and the amount of imports is much larger than that of the other commodities; SITC 5 and SITC 8 are growing at the second rate



and the amount of imports is also at the second level, but it is still much larger than that of the other commodities, and the overall change of the remaining other categories is relatively small and the amount of imported commodities is relatively small.

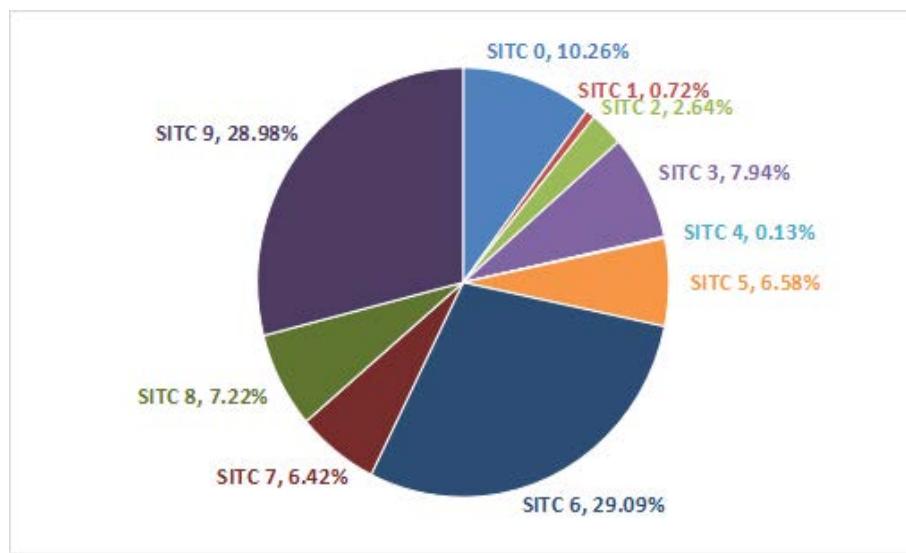
The structure of export trade between Uzbekistan and China is very different. In 2022, China's exports are characterised by diversification. As shown in Figure 9, China's largest foreign export is SITC-7 with a share of 46.42%. It is followed by SITC-8 with a share of 22.14%. SITC-6, with a share of 16.64%, and SITC-5, with a share of 8.72%, are also exported more frequently. China's foreign exports of other major product categories are involved, but account for a relatively small share.



**Figure 9: Commodity structure of China's exports and their share in 2022**

Source: UN Comtrade database

Uzbekistan's export structure is characterised by diversity. As shown in Figure 10, the main commodities exported by Uzbekistan to the world in 2022 are SITC-6 with a share of 29.09%, followed by SITC-9 with a share of 28.98%, and in the order SITC-0 with a share of 10.26%, SITC-3 with a share of 7.94%, SITC-8 with a share of 7.22%, SITC-5 with a share of 6.58%, SITC-7 with a share of 6.42% and a relatively small percentage of the remaining products.



**Figure 10: Commodity structure of Uzbekistan's exports and their share in 2022**

Source: UN Comtrade database

In terms of the share of different categories, the structure of Uzbekistan's and China's exports of commodities is very different. To further illustrate the differences in the commodity export structure of the two countries, an export similarity index has been introduced.

In 1979, Finger and Kreinin[7] first introduced the concept of an export similarity index to measure the similarity of exports of two countries or coalitions of countries in either the world market or a third party market. The index is based on the share of each product in each country's total exports and calculates the sum of the



minimum values of each product's share. This is done to remove the effects of large differences in country size from the results. Click and Rose[8] modified the export similarity index by replacing the export value with the export share and the modified formula is expressed as follows:

$$ESI_{(a, b, c)} = \sum_i^n \left[ \frac{\frac{E_a^i}{E_a} + \frac{E_b^i}{E_b}}{2} \right] \times \left[ 1 - \left| \frac{\frac{E_a^i}{E_a} - \frac{E_b^i}{E_b}}{\frac{E_a^i}{E_a} + \frac{E_b^i}{E_b}} \right| \right] \times 100\% \quad (2)$$

In the formula:  $E_i^a$  and  $E_i^b$  represents total exports of commodity  $i$  from country  $a$  or  $b$  to third country  $c$ .  $E_a$  and  $E_b$  represents total exports of commodities from country  $a$  or  $b$  to a third country  $c$ . The index takes values between 0 and 1. If it is equal to 0, there is no competition. If it takes the value of 1, there is perfect competition. The trade similarity index between Uzbekistan's and China's exports to the world for the period 2018–2022 was measured using UN Comtrade data, as shown in the Table 2.

**Table 2: Trade similarity index between Uzbekistan and China, 2018–2022**

Years	SITC 0	SITC 1	SITC 2	SITC 3	SITC 4	SITC 5	SITC 6	SITC 7	SITC 8	SITC 9	ESI
2022	2.05	0.09	0.70	1.79	0.10	6.58	16.64	6.42	7.22	1.37	42.95
2021	2.11	0.08	0.64	1.24	0.01	5.99	16.16	4.89	5.58	1.20	37.89
2020	2.49	0.10	0.58	1.21	0.05	4.12	16.85	3.35	4.63	1.10	34.49
2019	2.64	0.14	0.65	1.87	0.05	4.00	16.36	2.53	2.91	0.72	31.87
2018	2.67	0.15	0.69	1.87	0.00	6.14	16.35	1.87	3.09	0.24	33.06

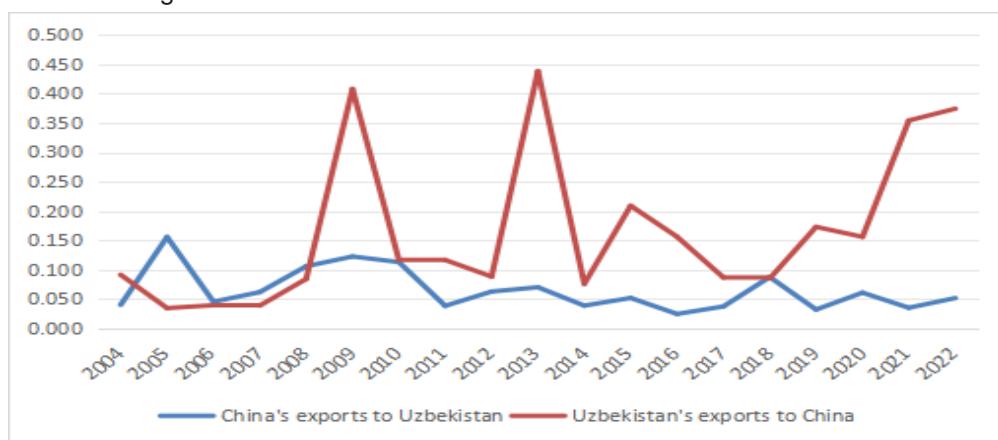
Source: UN Comtrade database

A comparison of the five-year data shows that Uzbekistan and China have the highest similarity index for SITC 6 products, with a maximum value of 16.85%, and there is weak competition between the two countries in the export of this product category, while there is almost no competition in other product categories. The export similarity index between Uzbekistan and China is increasing, but the value of this index is less than 50%, which indicates that there is no significant competition between goods exported from Uzbekistan and China.

The Lawrence index was introduced to reflect changes in the structure of Uzbekistan's and China's merchandise exports. This index is used to measure changes in the structure of a country's exports, and its value ranges from 0 to 1. The lower the value of the index, the smaller the change in the commodity structure of the country's foreign exports, and the higher the value, the greater the change. The formula is as follows:

$$L = \frac{1}{2} \sum_i^n |S_{i,t} - S_{i,t-1}| \quad (3)$$

In the formula,  $EX_{i,t}$  denotes the value of a country's trade in product  $i$  exported to the outside world in year  $t$ .  $Si,t$  denotes the trade value of a country's external exports of  $i$  in year  $t$  as a share of total external exports in that year. Using the UN Comtrade database with China as the reporter and Uzbekistan as the partner, the Lawrence index between Uzbekistan's and China's imports and exports of goods for the period 2004–2022 was calculated as shown in Figure 11.



**Figure 1: Changes in the Lawrence Index of Uzbekistan's exports and imports with China, 2004–2022**

Source: UN Comtrade database



As can be seen from the figure, the commodity structure of Uzbekistan's exports to China in 2004–2022 shows some volatility. The maximum value of the Lawrence index is 0.438 and the minimum value is 0.035, indicating that there are more obvious changes in the types of commodities exported by Uzbekistan to China.

The commodity structure of China's exports to Uzbekistan has been relatively stable overall, with the value of the index remaining below 0.1 for most of the time, indicating that there has not been much change in the types of commodities that China exports to Uzbekistan.

## 5. CONCLUSIONS

Between 2003 and 2022, Uzbekistan's bilateral trade with China grew at an average annual rate of 19.21%, the volume of trade increased 27-fold, and China became Uzbekistan's first source of imports and second destination for exports. It should be noted, however, that the size of Uzbekistan's trade deficit with China is also growing.

Overall, the share of Uzbekistan's exports to China as a percentage of China's imports and the share of Uzbekistan's imports from China as a percentage of China's exports are very small, indicating that Uzbekistan's bilateral trade with China has a limited impact on China. On the other hand, the share of Uzbekistan's exports to China as a percentage of Uzbekistan's exports and the share of Uzbekistan's imports from China as a percentage of Uzbekistan's imports are increasing significantly, suggesting that Uzbekistan's bilateral trade with China has a crucial impact on Uzbekistan's economic development.

Furthermore, measuring the openness of trade between Uzbekistan and China shows that both Uzbekistan and China have relatively open trade policies and both countries have a high degree of openness in foreign trade. However, Uzbekistan's economic development is more dependent on foreign trade, and its reliance on imports of key products and technologies may put it at a disadvantage in international competition, making it vulnerable to factors such as supply disruptions, price fluctuations or quality problems, and increasing economic risks.

A detailed analysis of the structure of bilateral trade between Uzbekistan and China shows that the structure of Uzbekistan's exports to China has changed significantly, indicating that the competitive advantages of Uzbekistan's commodities in the Chinese market are not significant enough, leading to marked fluctuations in the trade volume of some commodities. The commodity structure of China's exports to Uzbekistan is more stable, and the volume of trade has increased year by year.

Using the export similarity index to measure the exports of Uzbekistan and China to the world in 2018–2022, we find that the value of the export similarity index of Uzbekistan and China is lower than 0.5, but it is growing, which indicates that Uzbekistan and China have a weak competitive relationship in terms of export goods, but the competitiveness between them is increasing. Measuring the Lawrence index of bilateral trade between Uzbekistan and China also shows that the structure of Uzbekistan's exports to China shows some volatility and significant changes, while the structure of Uzbekistan's imports from China is more stable.

### Reference:

1. Zhao Qingsong, China-Uzbekistan Economic and Trade Relations: History, Present Situation and Prospects. Xinjiang Finance and Economy, 2014(5): p. 67–74.
2. G'aniev, K. and J. Begaliev, History of Investment Cooperation Between Uzbekistan and the Chinese Republics. JournalNX, 2021. 7(05): p. 67–68.
3. A. D. M., Economic, Cultural And Political Of Uzbekistan And China Relations. American Journal Of Social Sciences And Humanity Research, 2023. 3(07): p. 19–22.
4. Begaliev, J., Cooperation of Uzbekistan and China: yesterday and today. ISJ Theoretical & Applied Science, 2020. 5(85): p. 816–820.
5. Dadabaev, T., The Chinese economic pivot in Central Asia and its implications for the Post-Karimov re-emergence of Uzbekistan. Asian Survey, 2018. 58(4): p. 747–769.
6. Rashidova, F. S., Uzbekistan-China is on the way of strengthening bilateral relations. Theoretical & Applied Science, 2017(12): p. 80–86.
7. Finger, J. M. and M. E. Kreinin, A measure of export similarity and its possible uses. The Economic Journal, 1979. 89(356): p. 905–912.
8. Glick, R. and A. K. Rose, Contagion and trade: why are currency crises regional? Journal of International Money and Finance, 1999. 18(4): p. 603–617.

# Yashil

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va  
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Ijtimoiy, iqtisodiy, siyosiy, ilmiy, ommabop jurnal

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