Uzbekistan's Cotton Export Competitiveness in China

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Abstract. *This Article provides Uzbekistan's cotton export competitiveness in Chinese market over the years 2007-2017. Balassa comparative advantage index is used to analyze competitiveness for cotton products. The results show that cotton export of Uzbekistan to China had fluctual trend between 2007 and 2017 years. In 2008, an export value of cotton of Uzbekistan reached to top, consisting of 84 percent of total export. Based on investigations, it confirms that competitiveness of Uzbek raw cotton export in the Chinese market minimized over the decade. Meanwhile, non-retail pure cotton yarn export kept increasing. Because of economic and agricultural policy, Uzbekistan has been paying more attention on reprocessing of raw cotton and maximizing the volume of finished cotton products. However, Uzbekistan keeps one of the major cotton exporters to China up to now. This research learns some significant points to develop the competitiveness of Uzbekistan's cotton products export on the Chinese and global markets.*

Keywords: *China, cotton, competitiveness, economy, export, Uzbekistan.*

Introduction

After the collapse of the Soviet Union, the newly emerging states began to change their agricultural policies. In Uzbekistan, changes included: (1) re-distribution of land to families, in order to prevent social unrest; (2) increasing wheat production for food security; (3) implementing a quota system for cotton and wheat; (4) changes in agricultural subsidies; and, (5) disintegration of large collective farms.

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Cotton is one of the most important commodities in the world economy and it plays a major role in the economies of many developing and developed countries. Nowadays, the main cotton exporter

countries are United States, India, Brazil, Uzbekistan and Australia, while the biggest importers of cotton are China, Bangladesh, Turkey and Pakistan (Josily, 2015).

After the breakdown of the Soviet Union in 1991, Uzbekistan started to update its agricultural policies (Abdullayev, 2009). The necessity on unproductive land use and cotton production were the most important problems of Uzbekistan's agriculture in the early years of independence (Mamadjanova, 2017). Thereby, the government endeavoured to rise the productivity of production throughout farm reformation and diminishing the dependence on the import of food, to do diversification agriculture by slightly decreasing cotton crops and increasing other agrarian products.

Uzbekistan has reliably executed structural reforms in the cotton industry, which are represented in improving the image and competitiveness of Uzbek cotton in the world (Gulyaev, 2016).

Involving foreign investment, Uzbekistan is developing with the new perception of executing clusters for cotton and textile production to coordinate the different stages of an industry chain. Throughout the textile clusters concept, the government will assist foreign companies accepting tax privileges and customs benefits. Therefore, it ensures land to plant cotton, reprocess cotton, and produce final clothes (Stat.uz, 2018).

Uzbekistan is China's the third main source of raw cotton, after U.S. and India, considering for an estimated 11% of its total raw cotton imports around 161,641 tons for 2008/2009 (Responsible Sourcing Network, 2012).

There are some problems, which negatively impact on the export progress of cotton. Because of a double-landlocked country that Uzbekistan has not direct access to seaborne trade in the export of agricultural products. Moreover, water availability challenges and changeable weather because of climate change increase farmers' risk depending on their location within farm specialization and the irrigation system (Bobojonov et al. 2016).

This study analyses Uzbekistan's cotton export competitiveness in Chinese market between 2007 and 2017 years. The comparative advantage of Uzbek cotton in Chinese market is investigated within the selected periods. Therefore, it is considered the share of Uzbek cotton export in Chinese market and its influences on the economy.

Materials and Methods

Numerous measures of comparative advantage were recommended in the international trade literature and are being used. The Revealed Comparative Advantage (RCA) has been widely used in many studies. Liesner introduced RCA measurements and Balassa developed it further for analyzing and measuring comparative advantage across manufacturing industries.

The study was conducted using the revealed comparative advantage index to measure the competitiveness of cotton. Balassa (1965) proposed the primitive measure of Revealed Comparative Advantage (RCA) for analysis of countries' differentiation in international trade.

According to the recommendation of (Laursen, 2015), using a symmetric version of the RCA, as called the symmetric Revealed Comparative Advantages index. Several studies and researches focused on the analysis of export competitiveness through Revealed Comparative Advantage index.

$RCA_i = (X_{i,j}/\sum X_j)/(X_{i,world}/\sum X_{world})$ (1)

RCA_i = Revealed Comparative Advantage of cotton;

$X_{i,j}$ is Uzbekistan's exports of cotton to China

$\sum X_j$ is Uzbekistan's Total exports to China

$X_{i,world}$ is World's exports of cotton to China

$\sum X_{world}$ is World's total exports to China

The cotton has a revealed comparative advantage if $RCA_i > 1$. If RCA_i is less than 1, it is accomplished that the country has a comparative disadvantage in this product.

According to the Balassa index (BI) for measure the competitiveness of Uzbekistan's cotton exports, at first, we find data about total export and total cotton export of Uzbekistan to China, world's total export and total export of world cotton to China. All collected data within 2007 and 2017 years will be evaluated and analysed based on Balassa index. And it is used trade data of UNCOMTRADE database. Our dataset consist of cotton products at the 4-digits level of Harmonised system 2002 (HS4-2002) classification. Cotton export in the paper is identified as HS commodities 5201 (Raw cotton) and 5205 (Non retail pure cotton yarn) China is one of the major importers of cotton in the world (3% of global import in 2007).

Results and Discussion

All cotton exports are controlled by 3 state trading companies (Uzinterimpeks, Uzprommashimpeks and Uzmarkazimpeks) in Uzbekistan. These companies organize negotiations, delivery and shipping terms. The Ministry of Foreign Economic Relations' Department on Investments and Trade allocates market shares to each company. Uzbek cotton is sold at the world price in foreign currency. The trade between China and Uzbekistan has been developing year by years (Kienzler, 2011).

China is itself an important consumer of textiles. The domestic demand of China for cotton textile is bigger than its export demand and it is growing in recent years.China's share of world trade in textiles increased yearly during 2000 and 2017, growing from 14 to 38 percent (Colby, 2007).

Table 1. Chinese import from World 2007-2017

Year	Total import of China from World (MLN $)	Total cotton import of China from World (MLN $)	Share of cotton import %
2007	1,420,000	43,200	3.0
2008	1,710,000	42,400	2.5
2009	1,560,000	37,000	2.4
2010	2,210,000	51,800	2.3
2011	2,790,000	66,200	2.4
2012	2,830,000	72,300	2.6
2013	3,120,000	71,500	2.3
2014	3,070,000	62,800	2.0
2015	2,540,000	55,300	2.2
2016	2,470,000	50,700	2.1
2017	3,080,000	56,800	1.8

Source: Own calculation, UN Comtrade (2007-2017)

According to investigation, from 2007 to 2017, the growth rate of Chinese cotton import from the world has been continuing to slow down. However, the domestic demand for cotton textiles keep going up and large share of cotton textiles are exported. In 2017, the global import of cotton to China consisted of above $56 billion, which share 1.8% of the global import (Table 1).
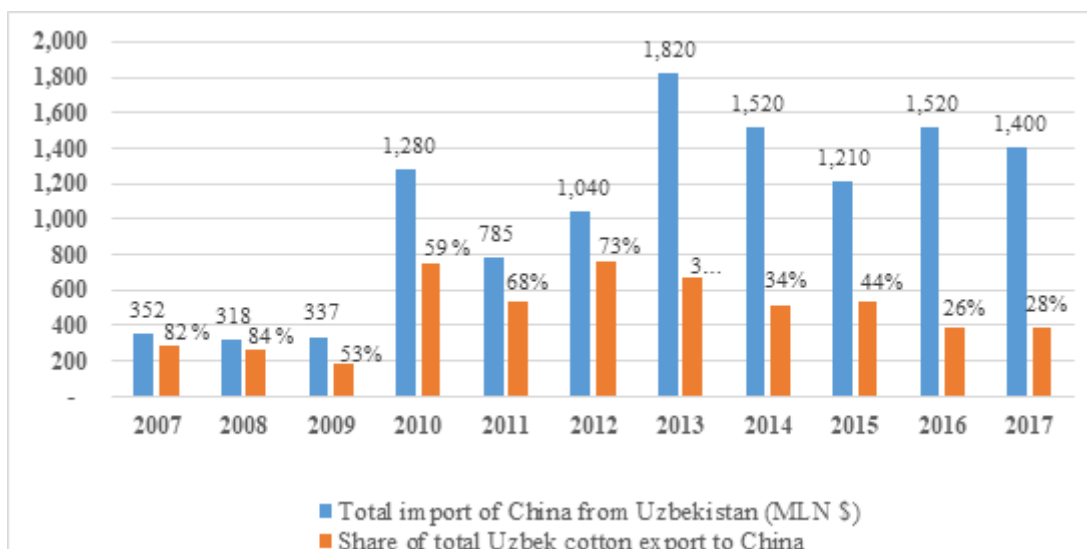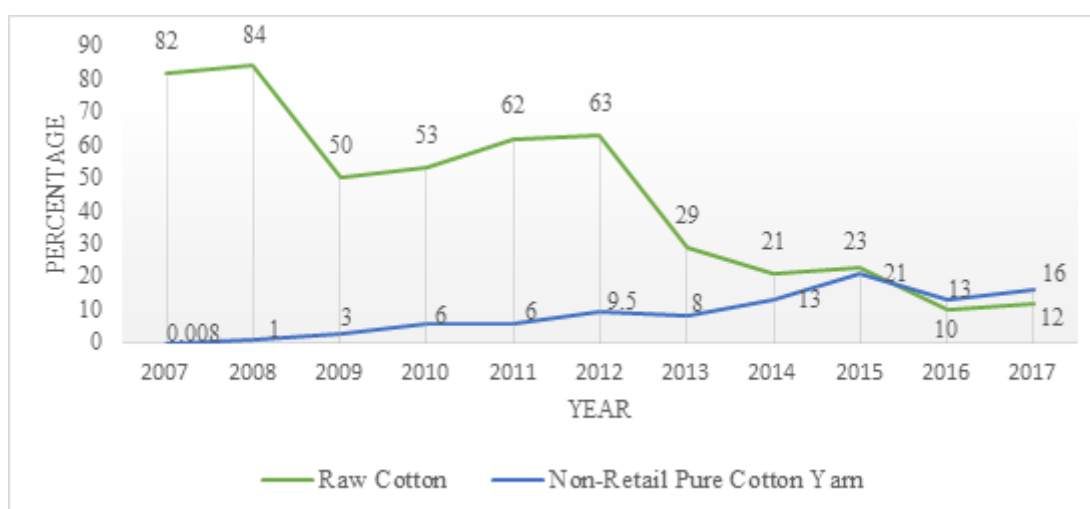
Figure 1. Chinese import from Uzbekistan 2007-2017

Source: Own calculation, Stat.uz (2007-2017)

The Figure No.1 demonstrates that total import of China from Uzbekistan and share of cotton. It could be seen that total Uzbek export to China enhanced significantly year by year, however the share of cotton at export plunged. In 2007, total export was estimated $352 million and almost 80% of that consist of cotton. Export value increased sharply in 2013, with an amount of $1820 million. And contribution of cotton decreased by 45% comparing to 2007. It shows slightly fall of total export value in 2017. The portion of cotton was composed only 28% of the total export to China.

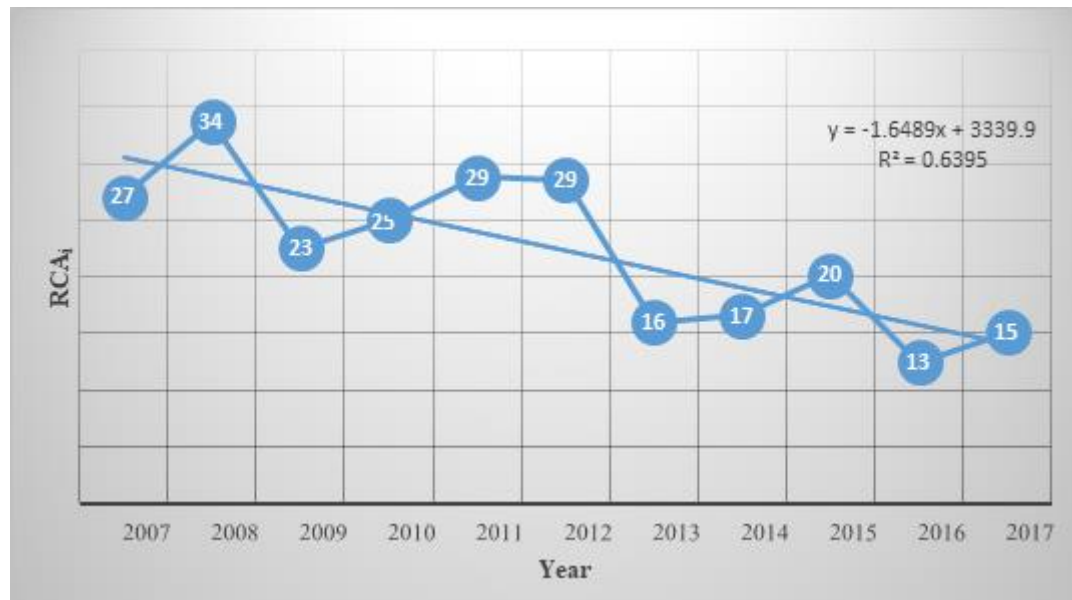Figure 2. Change in the share of Uzbek cotton products' export to China 2007-2017

Source: Own calculation, Stat.uz (2007-2017)

Uzbekistan mostly exports non-combed cotton fiber and non-carded, or higher grades, strict and good middling. Uzbek cotton is a natural white color and high strength. Moreover, it has less waste trash. Exported cotton to China is mainly used to produce toweling, knits, denim, twills, fabrics and corduroy. Based on appearance, color of the fiber and trash content, raw cotton (HS 5201) is sold for higher prices in the global market (Responsible Sourcing Network, 2012). The Figure 2 shows that difference in export of raw cotton (HS 5201) and non-retail pure cotton yarn (HS 5205) to China between 2007 and 2017. Raw cotton export consisted of 82% of total export of Uzbekistan to China. This indicator went down to 12% in 2017. One of the main reasons of falling of raw cotton export is developing of Uzbekistan's textile industry, mainly spinning of yarn. The government is expanding to reprocess raw cotton and promoting domestic textile industry. As a prove, the Figure 2 describes that non retail pure cotton yarn export progress reached to 16% from 0.008 between 10 years.

Uzbekistan can earn better revenue from selling textile production than raw cotton. In recent years yarn remains the biggest textile export item (Stat.uz, 2017). Moreover, Uzbekistan produces some cloth and clothing. According to the date from Comtrade, revenues from exports of textile products such as, fabric, yarn, and apparel for the first time almost to the same income as from raw cotton exports in 2013.

Figure 3. Revealed Comparative Advantage of Uzbek cotton in Chinese market

Source: Own calculation, UN Comtrade (2007-2017)

According to Balassa index, (Figure No.3) that comparative advantage of the Uzbek cotton in Chinese market was fluctual between 2007 and 2017. Balassa index indicator points above 1, which means the country has a comparative advantage.

Because of improved agricultural techniques, abundant harvest and good quality of cotton, Uzbekistan has comparative advantage in the market (Abdullayev, 2009).

During 2007 and 2008 years, comparative advantage of Uzbek cotton reached to top consisting of 27 and 34. The next years, the value of raw cotton export decreased slightly and it affected to the decline of Uzbekistan's comparative advantage in 2009 and 2010. Coming to 2011, comparative advantage was equal to 29, which means significantly growth after 2009. In 2013, this indicator started to go down rapidly with the amount of 16 and later to 15. Based on the investigation, it shows that comparative advantage of cotton export to China dropped by 44% between 2007 and 2017. The main reasons for that is Government reforms in agriculture and different implemention of different strategies in export of agricultural products. Therefore, enviromental features such as weather changes, irrigation problem affected little. Despite the reducing of cotton export, Uzbekistan remains to have comparative advantage in Chinese market. To purpose the development of exports of cotton products of Uzbekistan to China, it is essential to strengthen the competitiveness of export in products which have an important share in Chinese market. Moreover, Uzbekistan has a positive status to produce not only cotton but also other agricultural products.

Conclusion

The results of investigations prove that Uzbek raw cotton export to China had downward trend between 10 years. However, Uzbekistan keeps its competitiveness in the market. Uzbekistan has reached a remarkable achievement in involving foreign investment developing domestic reprocess of cotton and work together in cooperation with foreign textile companies. However, in order to create global competitive textile and clothing industry, it needs a limpid and productive environment and good reputation as a supplier. With the help and financing of the World Bank and other donors, Uzbekistan developed its drainage network and has made valuable progress in improving

productivity and environmental sustainability. Many more steps were taken, including the gradual liberalization of the cotton sector and the increase of investment in agricultural infrastructure and equipment.

Furthermore, it is significant to keep the stability of exports, because the fluctuations in the production of cotton and its exports have a negative influence on the sustainability for long period relationship. From a policy corresponding, Uzbekistan should facilitate its export opportunities for producers in agriculture field and develop the productivity of related logistical systems and the capabilities to connect the global supply chain. The scope of this investigation was limited by the analyse of export competitiveness in Chinese market. In the future, those investigations must include all agricultural export destinations of Uzbekistan. Also, one of the main significant things is to find obstacles which affect negatively on cotton export competitiveness.

If Uzbekistan wants to diversify its economy, it needs a regular supply of finance, and this is largely secured by the rigid government structures from massive cotton production. Uzbekistan has significant economic potential and it is not excluded that the country will embark on a path of rapid development in the future, as in China.

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