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Analysis of China's Agricultural Exports to Five Central Asian Countries

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Abstract
This paper uses the statistical description and the constant market share model to analyze the Chinese agricultural product export to Central Asian countries. It discovered that the establishments the SCO Shanghai cooperation organization and cooperation process promote agricultural exports; agricultural products from China to Kazakhstan, Kyrgyzstan and Uzbekistan is mainly attributed to the scale factor; in recent years, competition factor becomes the more important one. Owing to the market fluctuating, it restricted the exporting process in a certain degree. We can enhance the process in organization, construction, agricultural technology and marketing research.

Keywords: The five Central Asian Countries; Agricultural products; Export; Scale effect; Competition effect

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INTRODUCTION
The five Central Asian countries (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan) are typical temperate desert grassland continental climate. Because of their abundant light and heat resources, wheat (mainly in Kazakhstan), cotton (mainly in Uzbekistan), livestock and other agricultural products are relatively rich, and play an important role in the exporting market. In 2001 the Shanghai cooperation organization was proclaimed, except Turkmenistan, other countries are members of the Shanghai cooperation organization. In 2003 the organization established the "Shanghai Cooperation Organization Member States and Multilateral Trade and Economic Cooperation Program" strengthen trade and investment facilitation within the frame and the regional economic cooperation initial task. So in 2004, the favorable balance of China's agricultural products3 in the five Central Asian countries' market expand every year obviously, and showed strong export capacity. Therefore, it is quite significant to carry on this research.

At the present stage of China and Central Asia countries agricultural products trade empirical research mainly focused on the use of comparative advantage index, trade integration index, trade complementary index, intra-industry trade index and trade index to analyze. For example, Yin and Abra (2008) using the index of revealed comparative advantage, trade complementarities index estimates that China and Central Asian countries products have different advantages and trade complementary should promote the trade cooperation. In addition, Liu and Chen (2009) using the comparative advantage index and the relative trade index found that China and the trade of agricultural products in Kazakhstan to undertake calculating an analysis, found that most of China's agricultural products with comparative advantage and should be highlighted in the future and transfer the potential advantage into completion one. Li and Li (2011) by applying the correction of revealed comparative advantage index, trade strength index and the intra-industry trade index on bilateral agricultural trade complementary analysis. They think the bilateral agricultural factor of production and trade of agricultural products are complementary and coincide. But the

Chinese agricultural product export five countries of Central Asia an empirical analysis have no influencing factors. This article will use statistical description method and the constant market share model (CMS) on the impact of China's export of agricultural products in the five main factors and related problems for analysis and judgment to provide strengthen bilateral cooperation in the field of trade in agricultural products.

1. THE TRADE SITUATIONBETWEEN CHINA AND FIVE CENTRAL ASIA COUNTRIES

1.1 The Bilateral Trade of Agricultural Trade

For the convenience, at the first this paper will add the trade amount of China to the five Central Asian countries and view the five countries as a whole.

At the beginning of this century, the SCO has promoted the sharp development of bilateral agricultural products trade, the amount of bilateral trade increases from 53.03 million US dollars in 2001 to 385.05 million US dollars in 2010, with an average annual growth rate of 24.64% (Lin & Li, 2004), in which China exports to five countries by 2001 35.77 million US dollars up to 313.77 million US dollars in 2010, an increase of 278 million US dollars, the annual the growth rate of 27.29%; China imports from the five countries by 2001 17.26 million US dollars to 71.28 million US dollars in 2010, grow 53.02 million US dollars, with an average annual growth rate of 17.07%; China favorable balance by 2001 18.51 million US dollars up to 242.50 million US dollars in 2010, with an average annual growth rate as high as 33.10%, the specific situation is shown in Figure 1. From the graph we can see that the total trade in 04 years since the beginning of showing a rapid growth trend, this kind of growth is mainly driven by exports, and bilateral trade surplus expands year by year.

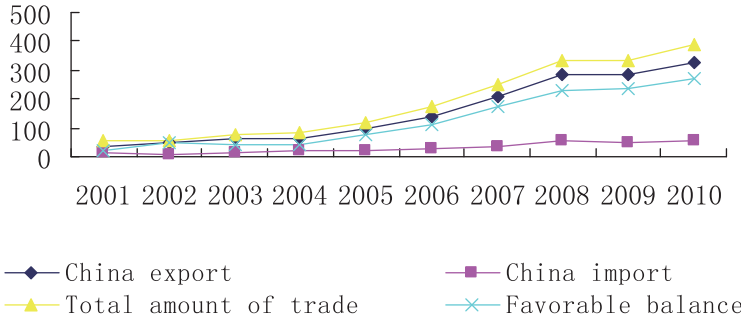

Figure 1
China Export/ China Import/ Total Amount of Trade/ Favorable Balance

1.2 The Import Situation of the Five Central Asia Countries

From all importing goods of the five countries, China' role in the import market position is very significant. In 2010, China is the second largest importing country to Kyrgyzstan, Kazakhstan Turkmenistan, Uzbekistan's and the first import country to Tajikistan's. On the five Central Asian countries from the world market imports of agricultural products and China in its share of the market situation, as shown in Table 1.

Table 1
The Amount of Five Central Asian Countries in World Agricultural Products Imports and China's Share (Unit: million US dollars, %)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Kazakhstan	531.16	542.51	682.63	927.32	1273.89	1661.97	2275.10	2991.30	2462.68	2331.00
	3.36	5.44	5.15	3.40	4.26	3.30	3.90	4.38	5.35	5.84
Kirgizstan	58.50	77.37	92.30	127.68	166.90	248.43	376.08	535.79	504.12	545.40
	5.59	6.60	8.33	6.23	13.23	24.70	20.47	17.10	18.72	23.09
Tajikistan	97.77	88.12	121.38	140.76	192.96	265.57	325.84	418.42	358.70	484.41
	0.52	1.29	3.40	1.61	1.23	1.42	2.04	2.22	3.39	2.70
Turkmenistan	67.66	94.95	138.95	126.78	140.99	135.62	168.12	347.13	275.02	474.68
	3.65	2.55	1.07	1.31	2.18	1.24	1.50	1.76	1.85	1.25
Uzbekistan	237.57	180.96	160.42	189.23	266.72	278.32	441.78	749.21	658.31	766.92
	4.91	6.53	6.48	8.04	5.86	5.93	5.83	5.40	5.18	4.28

Data resource: UN COMTRADE Database

In Kazakhstan, from the amount of agricultural products importing terms, sine 2001 to 2008 showed a rapid growth. Taking 2001as the base year and 2008 as compared period, the average annual growth of country in the past eight years is 28.01%. Under the impact of international financial crisis, the country's agricultural products imports in 2009 showing a large drop, with that of 2008 17.67%; in 2010 is still under its influence was in decline, but the decline somewhat fall after a rise, compared with 2009 5.35% decline. Second, from the Chinese in the agricultural products market share, in Kazakhstan's market we roughly fall step in a upward trend; from 2001 to 2006, and then decreased, and reached the highest point in 2002 5.44%, after falling to the lowest point in 2006 3.30%; then the Chinese market in the country's share steadily rising, in 2010 reached the highest point of 5.84%, compared to 2006 increased by 2.54 percentage points, with 0.4 percentage points higher than in 2002.

In Kyrgyzstan, the country's agricultural products imports has grown rapidly from 2001 to 2008, like Kazakhstan. Taking 2001 as the base year, the country in this period of time average annual growth rate is 37.22%, about 10 percentage points higher than the Kazakhstan. Also affected by the international financial crisis, in 2009 the country imports also declined, but the influence is limited, compared with 2008 5.91% decline; and the crisis did not last for long, 2010 the country imports appears resume to growth even exceed the 2008 which amounted to 545.4 million dollar. China's agricultural products in Kyrgyzstan market share has the rapid growth in the period from 2001 to 2010, despite some fluctuations, China has become an important agricultural product importing country to Kyrgyzstan.

Tajikistan, Turkmenistan, Uzbekistan have the similar situation as Kyrgyzstan. Taking the same basic year, they were 2001 to 2008 annual raise faster and in 2009 declined. In 2010 return to rise and the total over 2008 year. from 2001 to 2008 annual average growth rates of these countries are: 23.08%, 26.31% and 17.83%; 2009 and 2008 compared to a drop: 14.28%, 20.77%, 12.13%.In terms of market share, China's market share in Tajikistan also have greater volatility, from on the whole rise slightly; market share in Turkmenistan presents a fluctuation trend of decline, from 3.65% in 2001 to 1.25% in 2010; in Uzbekistan between 2001 and 2010 generally exhibits increased after the first drop of the inverted "U" type.

In general, in the import aspect, Kazakhstan is central Asia's biggest agricultural product importing country, and imports are more than other countries. Therefore, in the China agricultural products export, Kazakhstan should focus on the market; in market share aspect, China agricultural products market in Kyrgyzstan is growing rapidly and the highest rate, plus Kyrgyzstan and China are all as a WTO member, so China should pay close attention to Kyrgyzstan market. The international financial crisis on China in the market share has little influence on China, but do harm to the expansion in Kazakhstan, Kyrgyzstan, and Tadzhikistan market share.

2. MODEL SELECTION AND INDEX SETTING

The analysis of factors affecting exports mainly takes the constant market share model. In agricultural products trade, Sun & Zhao (2004) analyzed the export of China ASEAN agricultural products are the major influence factors by means of this method. The results show that under different periods and external environment condition, China ASEAN agricultural product export fluctuation mainly affected by demand factors, and structure factors play only a minor role. Besides the competitiveness of agricultural products in China decreased to some extent hindered China ASEAN agricultural product exports increase. Yang (2007) applying the model to the Chinese agricultural products exports to the EU growth analysis of the impact of factors, the research shows that Chinese agricultural products exports to the EU growth, in part from the EU to the world imports of agricultural products increased demand, partly due to China in recent years, the export of agricultural products competition ability increase apparently. In addition China export commodities composition effect also made positive contribution. He, Zhou, & Su (2009) by applying the model to the Chinese agricultural product export the United States of America growth factors analyzed that China agricultural product export to America growth is a major factor to improve the competitiveness. At the same time, China's agricultural products to the United States imports of agricultural products market adaptive capacity still has much room for improvement.

CMS the model initially submitted by Tyszynski in 1951 after the modification and perfection of some related scholars, Jepma in 1988 by extending the traditional CMS model, its use for the study of growth of export trade of foreign trade growth, has now become the source of one of the important research model. This paper uses the modified CMS model by He *et al.* (2009), the model will use export growth rate (R), for scale effect (SE), competition effect (CE) and two interaction effect (SOE). Among them: R for export country exports growth rate (the growth rate above a period as base is calculated, the mentioned growth rate are the calculation method of SE), for the country of import growth rate, CE for the export of export products in the importing country market share growth rate $SOE = SE * CE$. The equation can be expressed as: $r = SE + CE + SOE$(1).

This paper defines the agricultural products as HS1996 Category former 24 chapters. Product is I and country

as j, for China's export we have $r_{ij} = SE_{ij} + CE_{ij} + SOE_{ij}$ (2). To all growth rate we can use $r = \sum_{i=1}^{24} w_{ij}^0 r_{ij}$ (3). w_{ij}^0 is the agricultural product export amount and all agricultural products exports ratio. Putting (2) and (3) into (1), we can find $r = \sum_{i=1}^{24} w_{ij}^0 r_{ij} = \sum_{i=1}^{24} w_{ij}^0 SE_{ij} + \sum_{i=1}^{24} w_{ij}^0 CE_{ij} + \sum_{i=1}^{24} w_{ij}^0 SOE_{ij}$ (4), which is called first-layer decomposition, $SE = \sum_{i=1}^{24} w_{ij}^0 SE_{ij}$ $CE = \sum_{i=1}^{24} w_{ij}^0 CE_{ij}$, $SOE = \sum_{i=1}^{24} w_{ij}^0 SOE_{ij}$. At this time SE can be represented in other factors unchanged in China's imports of Chinese j market growth rate; CE can represent the export competitiveness of Chinese products the export growth rate; SOE representative of China to the j country agricultural product import market adaptive capacity, if the term is positive, China agricultural products in j's rapidly grow while slow growth is in the agricultural product market, and vice versa. The scale effect (SE) also can be divided into: scale SAGE and the size of the market effect (SME), expression is: SE=SAG+SME (5), where SAGE is j country agricultural product imports growth rate, at SME=SE-SAG. Effect of competition (CE) can be divided into: the CAGE and competitive market effect (CME), expression is: CE=CAGE+CME (6), where CAGE is j in China country agricultural product market share growth rate, at CME=CE-CAGE. The final equation of this model can be written as equation (6), which we call it as the second hierarchical decomposition.

$$r = \sum_{i=1}^{24} w_{ij}^0 r_{ij} = SAGE + (\sum_{i=1}^{24} w_{ij}^0 SE_{ij} - SAGE) + CAGE + (\sum_{i=1}^{24} w_{ij}^0 CE_{ij} - CAGE) + \sum_{i=1}^{24} w_{ij}^0 SOE_{ij} \quad (6)$$

3. CALCULATION AND ANALYSIS

3.1 The First Hierarchical Decomposition Calculation and Analysis

First, use equation (4) carrying out the first hierarchical decomposition analysis. We apply the export increase rate of decomposition for scale effect, competition effect and interaction effect to analyze export growth factors. The Chinese agricultural product export countries are divided into three stages: the first stage is 2002-2004 years, the first and second stages for 2005-2007 years, second to third phase for the years 2008-2010 (Yang, 2009), the results are showed in Table 2.

Table 2
Constant Market Model First Hierarchical Decomposition Results (Unit: %)

	From first to second stage					From second to third stage				
	Kazakhstan	Kirgizstan	Tajikistan	Turkmenistan	Uzbekistan	Kazakhstan	Kirgizstan	Tajikistan	Turkmenistan	Uzbekistan
SE	191.16	258.87	224.85	23.46	43.82	107.60	97.74	41.08	25.59	175.44
CE	-27.77	86.27	-4.13	6.38	17.70	-19.87	-28.87	81.93	30.60	-40.68
SOE	-57.74	223.33	-9.28	1.50	7.76	-14.03	-28.21	33.66	7.83	-71.38
R	105.65	568.47	211.44	31.34	69.28	73.7	40.66	156.67	64.02	105.65

Data resource: UN COMTRADE Database

For Kazakhstan, in the country's first to second stages, and second to third stages growth rates are scale effect. the first to the second stage of scale effect is higher than that of the second to the third stage; at the same time the growth rate of exports in the first to the second is higher than second to the third stage; and the competitive effect and interaction effect in the two stages are negative, but in the second to the third stage of the two effects of negative effect become weakened. The first and second stages for the scale effect contributed most of the first amount and growth is as follows: Chapter 20 (vegetables, fruit, nuts or other plant parts) 46.64%, chapter 10 and chapter 8 is 39.78% (grain) (edible fruit and nuts; melon or citrus fruit peel), 34.32% in the chapter 21 (miscellaneous food) 25.33%, chapter 19 (grain, grain powder, starch or dairy products; Confectionery mug-up) is 24.60%.But due to weak competitiveness, it has hindered the agricultural product export growth rate of the main product and the competitive effect value of -14.21%. The second to the third stage to the scale effect contributed most of the products into eight chapters, its increase values up to 75.52%; the second chapter (meat and edible offal) in the state of competition ability level is very low (the competition effect growth value -22.45), thus hindering China's agricultural products export growth. Chinese market in Kazakhstan two stage interactive effect is negative, the Chinese have always failed to aim at the rapid growth of the country's agricultural market, the first and second stages, mainly in the chapter 10 and 19, the second to the third stage is mainly manifested in the chapter 2, which caused by the competitiveness of products.

For Kyrgyzstan, China agricultural products to the country's export growth are mainly for scale effect. But unlike Kazakhstan, Chinese agricultural products market

in Kyrgyzstan two stage performance's gap is relatively large. From the export growth rate, the first to the second stage of the growth rate is 568.47%, and to second at the third stage straight down to 40.66%, a decrease of 527.81%; and competition effect and interaction effect are valued by turning a great relationship. In the first to the second stage, Chinese agricultural products to Kyrgyzstan market is stable in place, and the Chinese agricultural products in the domestic market has larger competitive which promotes Chinese agricultural products export; marketing in Kyrgyzstan, China has the dominant position of the main products of the project and own a satisfied effect value. Chapter 2 is 60.28%, chapter 41.45%. And in the second to the third stage, the Chinese market in the country's competitiveness has completely disappeared, in this stage, mainly for the second and the eighth chapter competition effect value decreases, the values were: -0.95% and -21.78%, which restricts the export of Chinese agricultural products; at the same time China in the stage of rapid growth of Kyrgyzstan's agricultural products but failed in grasping the market.

For Tajikistan, second to third phase of China on its export growth rate and the first to the second stage may decline, but still maintain high speed. In the first to the second stage and the second to third stages, the scale effect, although the growth rate of exports is still as high as 156.67%. But at the same time, the main relationship between the two countries is competition, competition effect value is 81.93% whose ratio scale is 41.08% high 40.84 points, illustrating this stage China accurately a grasp of the rapid growth of market of agricultural products, this time on the competition effect contributed most to the project and its values were: the chapter 9 (edible fruit and nuts; melon and citrus fruit peel) in 51.44% and in chapter 8 is 27.85%.

For Turkmenistan, China agricultural product export to the country's growth is similar, are the first to the second stage to the scale effect, second to third phase to competition effects. In the first to the second stage, the effect size of the greatest contribution for chapter 9, its value is 22.31%. Second to third stage of the competition effect contribution is the same in the chapter 9, the competitive effect value of 22.13%, and its scale effect value at this stage is still up to 22.13%.From a historical perspective, China exports of agricultural products in Turkmenistan is the smallest, but in China the two stages are better grasp of the country's imports of agricultural products market.

Form Uzbekistan, the two phases are in size effect. Competitive effect and interaction effect on Chinese agricultural products export growth to the influence and impact on Kyrgyzstan is almost the same. They are from the first to the second stage was converted into second to third stages of negative. The first to the second stage of the competition effect of simulative action with second to third stage of the competition effect rises to obstruct the function the same as the ninth chapter, the values from the first to the second stage 12.59% to second to third stage -20.02%. With the SCO, the difference between the two countries is in agricultural products from China to Uzbekistan second to third stages of export growth rate higher than that of the first to the second stage, this stage is mainly for Uzbekistan from the world market of agricultural products import volume growth and the formation of scale effect, on the scale effect to promote the largest chapter of the nine products, its value is as high as 126.46%, but China has failed to grasp of the market.

To sum up, Chinese agricultural product export to five countries of Central Asia in the two stages has a high growth rate; but for its influence factors, each country has its own different characteristics. For the above reasons led to the following results: first, the SCO promotes China agricultural products export to other countries and its export to members either in quantity or in growth and market share have emerged in degrees of growth, and as SCO member Turkmenistan from the first to the second stage, Chinese agricultural products export to its both share or growth relative to other countries, are low, second to third stages while in quantity by growth rate increased, but in the country's market share is decreased year by year. In addition, the distance factor also affects in a certain degree of the process, on the border with China, and other three countries in the first and second stages, first achieved high speed growth, but not bordering the black soil, in two to second to third stages to obtain relatively high speed growth. Once again, the calculation and formula has the very big relations, in the formula, we export more products which gave greater weight, and these products in China export five countries growth quickly, coupled with the formula calculation process of second stage growth is taking the first period as the base year calculated, before 2004 from China agricultural products exports in Central Asia is less common, thus the base year has a large number, coupled with China in the area of exports began to rapidly grow in 2004 (the situation in Figure 1 has reaction) meanwhile the other countries make Chinese exports growth during this period quickly, and in the third period, due to the second for the base year, the three countries stage has been made larger base, thus drop is more normal, and exports or a sharp rise in China starts to appear, and the export amount of Ukrainian, Turkish exports began to grow quickly.

3.2 The Second Hierarchical Decomposition Calculation and Analysis

Secondly, do the second level decomposition analysis on the export of Chinese agricultural products to the five Central Asian countries using equation (6). At this point we will scale down into the scale effect and scale effect of market competition, the effect of the total effect and competitive effect of market competition. Through the calculation, the decomposition results are in Table 3.

Table 3
Constant Market Model Second Hierarchical Decomposition Results (Unit: %)

	From first to second stage					From second to third stage				
	Kazakhstan	Kirgizstan	Tajikistan	Turkmenistan	Uzbekistan	Kazakhstan	Kirgizstan	Tajikistan	Turkmenistan	Uzbekistan
SE	191.16	258.87	224.85	23.46	43.82	107.60	97.74	41.08	25.59	175.44
SAGE	142.09	166.16	123.94	23.30	85.98	49.40	100.32	60.84	146.63	120.35
SME	49.07	92.71	100.91	0.16	-42.16	58.20	-2.58	-19.76	-121.04	55.09
CE	-27.77	86.27	-4.13	6.38	17.70	-19.87	-28.87	81.93	30.60	-40.68
CAGE	-15.05	190.51	-24.30	5.95	-16.80	34.98	-2.93	67.90	-4.62	-15.87
CME	-12.72	-104.24	20.17	0.43	34.50	-54.85	-25.94	14.03	35.22	-24.81

Data resource: UN COMTRADE Database

The scale accumulate general effect (SAGE) is the import of agricultural products of China's total imports growth rate, and market of scale effect (SME) is a high growth by giving greater weight to illustrate the weighted product market structure of Chinese agricultural products influence. From table 3 we can see that, in the first and second stages, Uzbekistan and other countries market of scale effects were positive, which shows Chinese export structure contribution is.in other words, the scale effect on Chinese agricultural product export countries have a greater impact, sorting are: Tajikistan, Kyrgyzstan, Kazakhstan, Turkmenistan and in this phase of scale effects on Chinese agricultural products export growth rate of Uzbekistan's exports contribute little to the system.

In the second to the third stage, the scale effect to the Chinese agricultural products exporting to Kazakhstan and the growth rate of Uzbekistan's exports have great influence on other countries significantly.

CAGE for Chinese agricultural products in the importing country market share growth rate, market competition effect (CME) and scale effect of market principle is similar, which illustrate the weighted competition market structure of Chinese agricultural products export growth rate influence.

In the first and second stages, except Kyrgyzstan, Turkmenistan, the other countries' compete for the overall effects are negative, described in this stage of China's agricultural products in the market overall competitiveness, to restrict the export of Chinese agricultural products rate of growth; in the competitive market effect aspect, China in the tower, soil, and the value is positive, the Chinese in this phase of the master of the three important agricultural product market. In the second to the third stage, Kazakhstan and Tajikistan's competition effect to positive, China in the two's market share increased, but in Kazakhstan due to competition in the market effect, the competitive effect eventually changed to negative. Thus restricting Chinese agricultural products to Kazakhstan export growth, showed China to Kazakhstan important agricultural products market has yet to hold in place; this stage China still better grasp the important agricultural products market in Tajikistan. In Turkmenistan, due to the correct grasp of the country's main agricultural product market, the stage is the competition effect is negative, but with the competition effect additive effects of competition turn to positive. So to promote China's export of agricultural products is Turkmenistan's growth rate. In Kyrgyzstan and Uzbekistan, both in the competition effect and in the competitive market effect, performance is not optimistic, is not well hold the two China agricultural products market, which has hindered the Chinese agricultural products to two countries export rate of growth.

In general, the first to the second stage, the import of agricultural products to the expansion of the scale of Chinese agricultural products export contains such main factors. In two countries weak competitiveness of Chinese agricultural products to restrict the exit of two countries, due to better grasp the important Tajikistan produce market which makes Chinese agriculture products exported to the country subject to competitive restriction is weakened; market in Kyrgyzstan China did not hold the country's main agricultural product market, but the Chinese agricultural products market in the country's strong competitiveness thereby pulling the Chinese agricultural products exports to that country; in the Turkmenistan and Uzbekistan markets this stage trade of small amount, China this two country exports of agricultural products at the same time by scale effect and market effects. In the second to third level, in Kazakhstan, Kyrgyzstan and Uzbekistan the scale effect in order to promote China's exports of agricultural products and the main factors of China's agricultural products; this stage in Kazakhstan's competitiveness has improved but not the correct grasp Kazakhstan important agricultural product market, the competitive effect on the export of Chinese Agricultural products is restricted to Kazakhstan; Kyrgyzstan China the important agricultural products market hold still did not reach the designated position, the competitive advantage is lost; and in Uzbekistan, China in the agricultural product is not competitive advantage and failed to capture the important market. In Tajikistan and Turkmenistan and China's agricultural products competition is larger than scope effect, and it has become the two countries to export the main factors.

CONCLUSIONS AND POLICIES

The organization was established at different extent pushing China on the five Central Asian countries of agricultural products export growth. But due to the geopolitical factors of China's agricultural products export growth rate in the first China has the rapid growth, while Uzbekistan and Turkmenistan high-speed growth of about backward. From an overall perspective, the three agricultural products import growth has the impact of Chinese agricultural products export to the growth of the main factors, and at the stage the other two countries mainly contribute to the Chinese agricultural products in the market competitiveness of agricultural products in China and pulling on the export growth of China's agricultural products in; the competitive market fluctuation, the Chinese agricultural product export five countries have restricted, and China on the important agricultural product market and grasp the agricultural product market adaptation are the lack of capacity. In order to further strengthen of Chinese agricultural products to the export capacity, from the conclusion of suggestions to do the following: first, to further develop the SCO in agricultural economic and trade cooperation effect, based on the framework of innovation in agricultural economic and trade cooperation between China and Central Asia Countries mode; second, strengthen the five Central Asian countries in traffic infrastructure and other areas of cooperation, as far as possible reduce the geopolitical factors on bilateral trade restrict; moreover, China should increase the styles agriculture investment and innovation of agricultural science and technology. In order to improve competitiveness of China's agricultural products in the market Central Asia, we should take market research and meanwhile to enhance the adaptive ability of China.

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1. The agricultural products means the 1-24chapters of HS category and the raw data come from http://comtrade.un.org/db/
2. In this paper, the base year is 2001, calculated by the geometric mean method.
3. In the decomposition process we use the first stage as the base for the second stage; use the second stage as the base for third stage. Because some base stage equals to 0, we cannot get the result. So if the amount of base stage is 0, the growth rate is 1. If the amount of the second stage is 0, the growth rate is 0 too.