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The Future Direction of BRICS Countries' Soybean Trade in the U.S.-China Trade Dispute

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Abstract

The agricultural commodity market is one of the key aspects in BRICS countries' economy. However, the US-China trade dispute continued to mainly reverberate around the soybean market. Most BRICS countries are soybean planters and traders. The U.S.-China trade dispute has changed the relative comparative advantages among the top soybean suppliers. As the largest importer, China's importing strategy change will impact the trade relations of BRICS countries. China is more likely to fulfill its demand by diversifying import. For example, importing soya meal, soybean oil, and broiler instead from other countries. Based on estimation, China can import extra 5.1 MMT oilseeds oil (including 2 MMT palm oil, 300 TMT rapeseed oil, 500 TMT soybean oil, 2 MMT sunflowerseed oil and 300 TMT other oil), 5.4 MMT oilseeds (including 5 MMT soybean, 1 MMT rapeseed, 200TMT peanut and 200 TMT sunflower seeds), 7 MMT soybean meal and 4.83 MMT meat (including 593 TMT , 4.02 MMT broiler and 220 TMT beef). Within China, the Chinese government has taken actions to boost domestic production. The restruction of China's soybean industry is undergoing. In order to ensure stable supply, China's overseas agriculture investment and cooperation will increase too. Additional imports will strengthen the soybean trade relations with Brazil. Other trade relation with the potential production countries, such as Russia, are developing. Except for soybean, diversified imports will impose opportunity to BRICS countries to connect each other more deeply in seeds oil and meat trade. As the main exporter of soybean oil and sunflowerseed oil, India and Russia's trade orders from China may increase. And the China's broiler trade relations with Brazil may be tighter. To ensure stable imports, China will enhance the overseas agricultural investments. Not only processing and transportation, but also plantation will be the core of China's future overseas agricultural investment strategy.

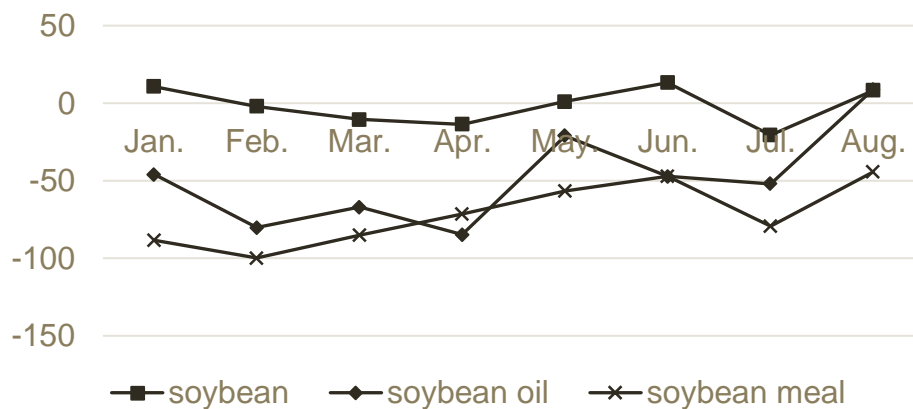
Keywords

Soybean; U.S.-China trade dispute; Diversified import; Import substitutes; Trade relations

I. Introduction

The agricultural commodity market is one of the key aspects in BRICS countries' economy. However, the US-China trade dispute continued to mainly reverberate around agricultural commodities. In response to the Trump administration's proposed tariffs on Chinese imports, China imposed an extra 25 percent duty on U.S. soybeans. Before this additional import tariffs, China's tariff rate on imported soybeans was 3%, the VAT rate was 10%, and the comprehensive tax rate was 13.3%. After the addition of 25% import tariff, the tariff rate for U.S. soybean rose to 28%. With the VAT rate unchanged, the comprehensive tax rate increased to 40.8%. As a result, the price of imported US soybeans will increase by 24.27%. The price of US soybeans in 2017 was about 3330.91 yuan/ton, and the price of US soybeans in the first half of 2018 was about 3303.69 yuan/ton¹. After the addition of 25% tariff, the price will rise to 4,139.32 yuan/ton and 4105.49 yuan/ton respectively.

With price increasing, U.S. soybeans will lose its comparative advantage. Combined with trade constraints imposed by Chinese government, United States may lose the majority of its soybean market in China. Chinese soybean traders flushed to Brazil to import more soybeans. As a result, soybean prices in Brazil have reached a 21 month high. Argentina and the E.U., who are Brazil's soybean buyers, imported more from U.S. instead. Actually, soybean exports from Russia to China increased by 64% compared with MY 2016/17. Brazil is the top 2 soybean exporter in the world and the biggest supplier to China. About half of China's soybean imports are from Brazil, which accounts for over 40% of Brazil's own



¹ Source: BRIC data, P.R. China

production. Brazil's supply, starting from May to September, supplements the demand gap of countries in the Northern hemisphere. In order to fill the huge demand gap, Chinese government took two actions. The first is to import from diversified supplier, including other Asia countries and Africa. The second is to reconstruct domestic soybean industry. The first step is to increase soybean acreage by providing extra subsidies.

Figure 1 Monthly soybean import increase percentage in 2018 compared with 2017: units in %

Source: the General Administration of Customs, P.R. China

With the trade dispute escalating, the soybean trade pattern is change gradually. BRICS countries are soybean planters and traders. The changing global trade pattern will significantly impact soybean trade pattern among BRICS countries. According to the data released by the General Administration of Customs, China imported 19.57 MMT soybeans from January to March, with increasing 0.2% compared with last year. Share of import resource countries are changing as well. Compared with March 2017, U.S. soybeans (the 3.1 million tons of) imported in March 2018 decreased by 27%. At the same time, soybean import from Brazil (150 TMT) increased by more than 30%. Overall, total soybean import in China decreased before May (see Figure1). Total import before August remained stable. However, soybean oil and meal imports decreased. In the future, as an open large developing country, how will China respond to this challenge? Confronting the vulnerable international trade, how will BRICS countries interact with each other?

The U.S. trade dispute will impact global trade relation pattern comprehensively. The soybean industry is just a start. As a widely-planted crop all over the world, the reconstructing of the soybean trade relations will influence the domestic agricultural even processing industries in some relative countries. For the five newly industrialized countries, this may bring a new challenge as well as opportunity. This paper discusses the current soybean industry in China and recent actions to deal with the soybean import gap. As rooted in global soybean trade deeply, potential influences for other BRICS countries are analyzed.

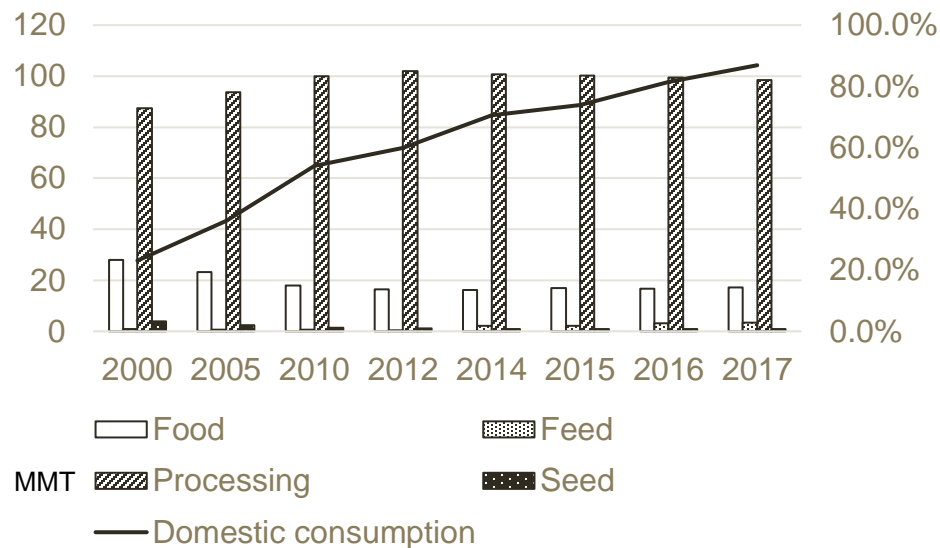
This paper is organized as following. Next section briefly introduces China's soybean industry and relative policy evolution. Section 3 gives an overview of BRICS countries' soybean industry. Section 4 discusses China's choice to cope with the demand gap caused by U.S. trade dispute. The volume of other substituting commodities of the U.S. soybean import are calculated. Section 5 analyzes how China's diversified import strategy will change the trade patterns in BRICS countries and the world. Section 6 gives some concluding remarks.

2. Overview of China's soybean sector

Soybean is considered one of the five oldest cultivated crops and was utilised by the Chinese as a source of food before 2500 BC. After joining the WTO, China changed from a pure soybean exporter to the largest soybean importer in the world.

2.1 Consumption

China's soybean consumption keep increasing rapidly. In 2017, the volume of domestic consumption was 104.28 MMT, over four times the amount in 2000



(27.70 MMT)², and accounted for 29.54% of the global soybean consumption (353MMT)³. As a raw material for making traditional Chinese soyfoods (such as tofu, soybean milk, soy sauce), soybean consumption for food account for an obvious part. The direct food consumption for soybean was 15 MMT in 2017, over twice than the amount in 2000 (6.48 MMT)⁴. However, its proportion in total consumption keep decreasing. After the peak in 2000 (23.4%), the proportion of food proportion decreased to around 13%-15% of total consumption in recent five years.

Figure2 China's domestic soybean consumption and its composition (food, feed, processing and seed): 2000-2017 (units of consumption in MMT; others are percentages)

² Data sources: BRIC data, P.R. China

³ Data sources: USDA

⁴ Data sources: BRIC data, P.R. China

Source: BRIC data, P.R. China

The main reason driving China's domestic consumption high is the demand for processing (see Figure2). The soybean consumption for processing is 72.8% in 2000, then increased to above 80% in 2008 (83.01%) and reached 82%-83% in recent years. The decrease of food's proportion almost transferred to the processing part. Due to the fundamental changes in China's food consumption structure, demands for soybean meal and oil are increasing remarkably. That drives the soybean demand to increase for processing. Soybean oil is the most consumed vegetable oil in China, which account for about 40% of total vegetable oil consumption (Chen et al., 2012). In 2006, the vegetable oil consumption per capita was 10kg, 5.28kg higher than rural residents' consumption and 0.62kg higher than urban residents in 2006. Increasing meat consumption pushed the rapid development of animal husbandry. Each Chinese consumed 26.1kg meat (including , beef and lamb) on average in 2016, 9.09kg higher than rural residents' consumption and 2.32kg higher than urban residents in 2006⁵. Soybean meal is the top 2 feed ingredient in the swine and broiler feed. As a result, China's feed industry processed 105 million tons protein raw materials 2017, in which soybean meal accounted for 72.3 million tons. Currently, China has the largest soybean processing industry in the world, forming a mature soybean food modern processing system. Some new soybean-based industry, such as Soy protein concentrate (SPC) industry, are also developing rapidly. Raw soybeans are seldom used as feed, so the feed consumption proportion were very low Even though its amount increased remarkably (see Figure 2). Both the amount and proportion of seed soybeans are decreasing. Because Chinese farmers are losing the tradition to keep seeds from their harvest.

2.2 Production

Compared with increasing consumption, soybean production in China was stuck (see Figure3). Before entering WTO, China's soybean acreage was 9.31 million hectare in 2000. The peak was reached at 9.59 million hectare in 2005, and the bottom was 6.51 million hectare in 2015. In 2016, total acreage struggled to recover to 7.20 million hectare⁶. Yield was increasing slightly since 2000. The yield was 1.70 tones/hectare in 2017, only 140.59kg higher than that in 2000 (1.66

⁵ Data source: China Statistical Yearbook 2017, National Bureau of Statistics, P.R. China

⁶ Data source: National Bureau of Statistics, P.R. China

tones/hectare)⁷. Compared with 2.9 tones/hectare in the United States⁸, the productivity is much less competitive. With decreasing acreage and increasing yield, total production actually decreased. Soybean production in 2000 was 1.54 million tones and 1.29 million tones in 2016. The largest production was reached in 2004 (1.74 million tonnes) and lowest was 1.18 million tones in 2015, right after the Temporary Storage for soybean was canceled in 2014.

The northeast spring soybean sub-regions in Heilongjiang, Jilin, Liaoning and eastern Inner Mongolia are the most advantageous areas for soybean production in China. Production in these four provinces account for half of the national production. In 2015, production in this soybean-leading producing region was 5.70 million tones and the national production was 11.79 million tones. In 2006, production in this soybean-leading producing region reached 6.50 million tones accounting for 59.49 of total production⁹. Among these four provinces, Heilongjiang is the largest soybean producing province. It has the largest dry and windy region feasible for soybean. Its production was 4.28 million tones in 2015, accounting for 36.32% of total production. Dates back to its peak year 2006, soybean production in Heilongjiang was 6.52 million tones (43.2% of total production). Jilin was the second largest producer in 2000, whose production was 1.20 million tones. But in 2015, its production decreased to 0.29 million tones. Currently, Inner Mongolia is the second largest producing province (0.88 million tones in 2015).

Chinese government forbid planting genetically modified soybeans. All the domestic production in China are Non-GMO soybeans. They are traditional varieties in China, whose protein content is high and oil content is relatively low. With slow progress in seed technology, the yields have remained almost constant for several years. Soybean farmers have to struggle to boost yields and productivity. Besides, small scale farming and inadequate agronomic practices

⁷ Data source: National Bureau of Statistics, P.R. China

⁸ GAIN Report, No. CH17012, Oilseeds and Products Annual_Beijing, P.R. China, 3-16-2017, USDA, FAS

⁹ Data source: National Bureau of Statistics, Ministry of Agriculture and Rural Affairs, P.R. China

(such as the lack of proper crop rotation) are also major impediments faced by Chinese soybean farmers¹⁰.

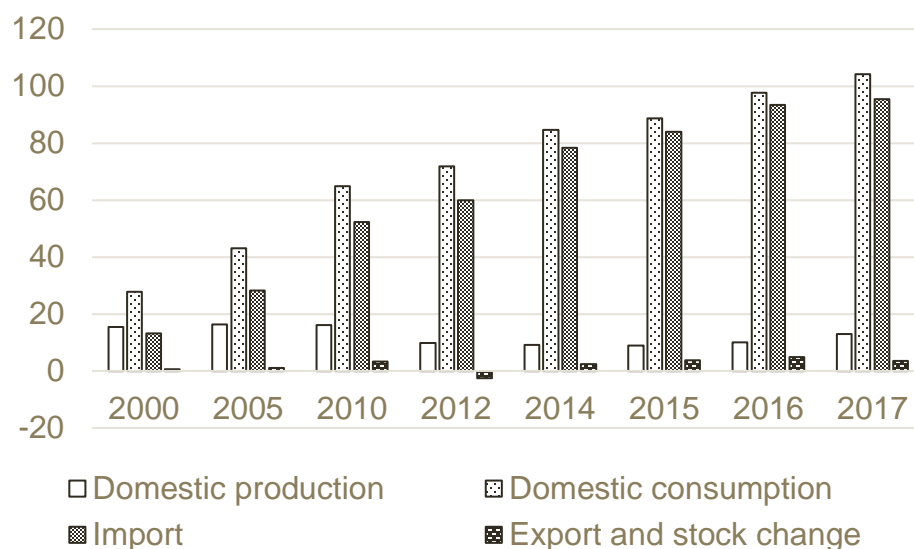


Figure3 China's domestic soybean production, consumption, import, export and stock change: 2000-2017 (units in MMT)

Source: BRIC data, P.R. China

2.3 Trade

Inferring from the consumption and production data, China's domestic production remains insufficient and unable to meet growing consumption of soybeans, especially for the processing use. The intermediate and finally goods of soybean processing are soybean meals and oils, which are urgently needed by the market. Actually, consumptions for soybean oil and meal are primarily satisfied in two ways: raw soybeans are crushed to produce oil and meal, and they are imported directly. But China has chosen soybeans, mainly because China needs soybean meal which is the main source of by-products and feed protein after soybean oil extraction (Chen et al., 2012). Another reason to import soybean is that domestic soybean's oil content is around 17%, much lower than the U.S. GMO soybeans (18%). One percentage difference in the oil content in soybeans means 1 ton difference in oil when processing 100 tones soybeans. As a result, China's soybeans are used to produce soyfoods. The processing needs are totally satisfied with imports.

¹⁰ GAIN Report, No. CH17012, Oilseeds and Products Annual_Beijing, P.R. China, 3-16-2017, USDA, FAS

China is the world's largest soybean importer. China imported 93.5 MMT soybeans in 2016 and 95.5 MMT in 2017, about 65% of global soybean imports¹¹. Brazil is the largest supplier to China, 50.93 MMT of soybeans were exported to China from Brazil (see Table1). The second is United States who exported 32.85 MMT to China. Argentina is the third largest supplier (6.58 MMT in 2017). The different variances of import amounts from Brazil and United States attribute to different harvesting seasons in different hemisphere locations.

China also imports soybean oil and meals. In 2017, China imported 628862.4 MT soybean oil. Over half of soybean oil import were from Brazil (338848.4 MT). United States was the second largest oil and exported 82844.09 MT to China. The third one is Ukraine and supplied 63664.67 MT to China. For soybean meals, China imported 61203.35 MT in 2017. 41559.479 MT came from India and 7060 MT from South Korea¹². Compared with soybeans, imports of soybean oil and meals are much less.

Table1 China's soybean import sources in 2017 (Units in MT)

Month	Brazil	U.S.	Argentina	Canada	Russia	Total
Jan.	25.30	677.74	6.88	51.10	3.95	765.45
Feb.	68.74	442.61	0.00	36.37	0.00	553.70
Mar.	174.93	422.26	1.00	26.98	0.00	632.52
Apr.	615.03	177.71	5.60	0.86	0.00	801.41
May.	793.91	146.96	6.60	9.02	0.00	958.58
Jun.	641.79	38.71	71.28	1.10	0.00	768.64
Jul.	763.59	49.99	147.43	4.15	0.00	1008.09
Aug.	607.93	17.95	137.92	1.70	0.00	844.77
Sep.	593.81	93.73	73.85	0.86	0.00	811.25
Oct.	337.61	132.52	77.28	6.42	0.00	585.59
Nov.	276.05	466.17	66.50	13.67	0.00	868.33
Dec.	194.19	618.93	64.00	52.62	0.00	954.67

¹¹ U.S. Department of Agriculture.

¹² Source: General Administration of Customs, P.R. China

Total	5092.88	3285.28	658.34	204.85	3.95	9553.00
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Notes: HS Code 12019010, Yellow soya beans, whether or not broken, other than for seed

Source: General Administration of Customs, P.R. China

2.4 Policy evolution

China used to be the net soybean exporter in 1990s. However, Soybean is currently the least self-sufficient major crop in China. It lowers the average self-sufficient rate of total staple crops below 90%¹³, which touched the tolerance of the Chinese government. The reasons for such a low self-sufficient rate of soybeans are complicated. In the WTO negotiations, China lifted the import quota for soybeans and reduced the import tariffs to 3%. Soybeans made huge sacrifices for trade balance. In China, land resources are limited, and the principle of ensuring food security is consistent. As a result, crops that have higher yields (such as another feed ingredient, corn) are given priorities. After that, the seed technology in United States keep progressing rapidly. This helped United States to meet the needs of consumers better with lower production costs and higher production. Chinese farmers have no ability to compete the high-quality and low-price importing soybeans. More and more Chinese soybean processors turned to import more high-oil importing soybeans, which cutting off the sales relationship with Chinese farmers gradually. Besides, changing consumption structure also contributes to high imports. More oil and meat in Chinese people's daily life restructured the processing industry, which boosted the soybean oil and meals' production.

In order to support soybean producers, Chinese government carried out the Temporary Storage policy to from 2008 to 2013 (which is similar to floor price policy). In 2014, the Target Price policy took the place of the Temporary Storage to restore market-oriented pricing mechanism. In 2017, Target Price was substituted again by "market-oriented procurement + subsidy" policy. The evolvement of soybean support policy reveals the marketization trend of China's soybean market.

¹³ In China, the tolerance level of government for total grain crops is 90%, for three major crops (wheat, rice and maize) is 95%.

However, the U.S.-China dispute will make the Chinese government introspect current soybean trade pattern and domestic soybean industry layout. In May 2018, the government took actions to increase soybean's acreage in Heilongjiang and Jilin provinces to cope up with the trade dispute. Heilongjiang province was asked to plant additional 5 million mu (333 thousand hectare) in 2018. Except for the pilot arrangement of 11.5 million mu for crop rotation, another 2 million mu (133 thousand hectare) of cultivated land will be added with a subsidy of 150 yuan/mu (2238yuan/hectare).

3. Overview of BRICS Countries' soybean sector

Most BRICS countries are soybean planters and traders. All the BRICS countries produce soybeans and are in the top 10 largest soybean-producing countries. Total soybean acreage of BRICS countries are 56.46 million hectares, accounting for 45.52% of the world's soybean production in 2017 (see Table2). In the world, United States is the largest soybean production country. Brazil is the second largest producing country and the first largest soybean exporter. China is the fourth largest producing country but the largest importer. In the Northern hemisphere, the Black Sea region is an emerging production area where has some potential suppliers, especially Russia.

3.1 Production and worldwide distribution

Brazil's acreage is 35.10 million hectares, over 3.5 times over India's acreage, over 4 times over China's acreage. Russia's acreage is 2.57 million hectares, and South Africa is only 790 thousand hectares. For total production, Brazil is the largest in BRICS countries, whose production is 119.5 million metric tons, accounting for 35.49% of the world's production. Due to China's higher yield, China's production is much higher than India, which is 14.2 million tons. Other countries production are lower than 10 million tons. India's production is 8.35 million tons, Russia is 3.62 million tons and South Africa is 1.55 million tons. BRICS countries' total production are 147.22 million tons.

Table 2 Production of soybean, soybean oil and soybean meal in BRICS, 2017

	Soybean acreage	Soybean production	Soybean oil production	Soybean meal production
	1000 hectar e	1000 tonne s	1000 tonne s	1000 tonn es
	propo rtion in the world	propo rtion in the world	proport ion in the world	proportion in the world

		28.30	11950	35.49		15.03	3330	
Brazil	35100	%	0	%	8250	%	0	14.41%
Russia	2568	2.07%	3621	1.08%	833	1.52%	3664	1.59%
India	10156	8.19%	8350	2.48%	1368	2.49%	6080	2.63%
						29.72	7207	
China	7850	6.33%	14200	4.22%	16307	%	2	31.18%
South Africa	790	0.64%	1550	0.46%	220	0.40%	947	0.41%
		45.52	14722	43.72		49.16	1160	
BRICS	56464	%	1	%	26978	%	63	50.21%

Data sources: NBER, U.S.

For the soybean oil and meal, China is the largest soybean processing country. BRICS countries' soybean oil production is 26.98 million tons, accounting for 49.16% of the world's production. China's production is 16.31 million tons, accounting for 60.45% of BRICS countries' production. The second largest is Brazil, 8.25 million tones, accounting for 30.58% of BRICS countries' production. India's soybean oil production is 1.37 million tones, Russia is 0.83 million tones and South Africa is only 0.22 million tones. Soybean meal is the by-product of soybean oil, so meal's production proportion distribution is quite similar to soybean oil's. China is the largest soybean meal production country among BRICS countries, whose production is 116.06 million tons. Brazil is the second, whose production is 33.3 million tones. Other three countries' production are relatively low. India is 6.08 million tones, Russia is 3.66 million tones and South Africa is 0.95 million tones. The proportion of BRICS countries' soybean meal production in the world's production is 50.12%.

Soybeans are produced around the world. The production cycles are different in different countries. Geographical distribution of soybean production map a potential supply capacity among BRICS countries. Brazil and United States are the representatives of the main soybean production country in Northern and Southern hemispheres respectively. Argentina, the third largest production country, is also in the Southern hemisphere. This help to maintain continuous soybean supply around the world. Among BRICS countries, South Africa is in the Southern hemisphere. Both countries' soybean enter into market from spring to mid-autumn. China, India and Russia are located in the Northern hemisphere, whose production enter the market from autumn to early spring. Due to large difference in BRICS countries production, the substitution on BRICS countries' planting and harvest seasons can't ensure a stable and continuous supply. Because Brazil's production is much larger than the other countries, even higher

than the sum of other four countries. From table , two countries' production in Southern hemisphere is 121.05 million tones. The other three countries' production in the Northern hemisphere is 26.17 million tones. The production in the Southern hemisphere is 4.63 times over that in the Northern hemisphere, which shows an obvious production imbalance.

Table3 Planting and harvest season in BRICS, United States and Argentina

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Brazil												
Russia												
India												
China												
South Africa												
United States												
Argentina												

Notes: The green means the planting season and the red one means the harvest season. The yellow ones mean the supply season.

Data resources: Brazil and India's data are from FAS, USDA;

3.2 Trade flow among BRICS countries in 2017

Before the U.S.-China trade dispute, the soybean trade flows among BRICS countries are relatively stable. A majority of trade flow concentrated on the Brazil and China (see Table 4). Brazil is the large soybean exporter in the world. And the export amount to BRICS countries, especially Russia, India and China, accounted for the majority of total export. In 2017, Brazil exported 53.80 million tones soybeans to China, 1.03 million tones to Russia. Brazil sold 505.00 thousand tones soybean oil to India and 335.24 thousand tones to China. At the same time Brazil imported 253.72 thousand tones soybean and 58.11 thousand tones soybean oil from the other countries in the world. Brazil seldom exported soybean flours and meals to other countries.

Table 4 Soybean and relative products' trade flow among BRICS (tonnes), 2017

Reporter \ Partner			Brazil	Russia	India	China	South Africa	World
Brazil	soybean	Export		1029281	0	53796970	0.075	68154559
		Import		0	0	0	0	253718.8
	soybean oil	Export		0	504995.7	335240.2	2.08	1342515
		Import		0	0	0	0	58113.35
	soybean flours&meals	Export		0	0	0	0	58.596
		Import		0	0	0	0	0
Russia	soybean	Export	0		0	451398.5	0	519703.8
		Import	1155500		0	1319.615	0	2236746
	soybean oil	Export	0		0	137777.4	0	521031.1
		Import	0		0.022	1.18	0	1144.097
	soybean flours&meals	Export	0		0	0	0	3048.871
		Import	0		0	0	0	140.1
India	soybean	Export	0	0.1		0	4.283	292490.6
		Import	0	0		0	0	77751.5
	soybean oil	Export	0	0.015		0.48	0	2034.49
		Import	471087	0		0	0	3338735
	soybean flours&meals	Export	0	0		1024.24	1.72	70340.57
		Import	0	0		0	0	0.001
China	soybean	Export	1.306	1319.38	225		0	112184.7
		Import	50927379	508124.9	0		0	95534221
	soybean oil	Export	0	0	0		0	129470.8

		Import	338848	128162.7	0		0	653434.4
	soybean flours&meals	Export	0	0	0		0	1709.034
		Import	0	0	0		0	8.525
South Africa	soybean	Export	0	0	0	0		2346.817
		Import	0.075	0	0.001	6.808		31322.68
	soybean oil	Export	0	0	0	19.28		48928.34
		Import	3.988	0	0.06	0		189759.1
	soybean flours&meals	Export	0	0	0	0		5655.971
		Import	0	0	0.012	0		3187.809

Data sources: UN comtrade. Soybean data is from “1201. Soya beans, whether or not broken”. Soybean oil data is from “1507. Soya-bean oil and its fractions, whether or not refined, but not chemically modified.” Soybean flours & meals are from “120810. Flours & meals of soya beans”.

India’s trade of soybean and relative products are relatively small. India mainly exported soybean and soybean flours and meals, and imported soybean oil. Its soybean, soybean flours & meals’ trade relationships with other BRICS countries were quite loose. One exception is soybean oil import from Brazil, which is 471.09 thousand tones in 2017. However, this amount only accounting for 14.11% of its total soybean oil import.

China is the largest soybean buyer in the world. Due to large domestic supply gap, China imported 50.92 million tones soybean from Brazil, which accounted for over 53.31% total import, and a small amount from Russia. Trade amounts of soybean oil, flour and meals are much smaller. China exports few soybean products and only imported a small amount of soybean oil. The soybean flours and meals industry were almost independent from the rest of the world.

Compared with other four countries, the trade scale of South Africa is quite small. And its main trade partners are not BRICS countries. South Africa only imported few from Brazil, India and China.

3.3 Other information in BRICS countries’ soybean industry

Brazil is the largest soybean exporter in the world and the biggest supplier to China. About half of China's soybean imports are from Brazil, which accounts for over 40% of Brazil's own production. Brazil's supply, starting from May to September, supplements the demand gap of countries in the Northern hemisphere. The higher protein levels of Brazilian soybeans, the additional Chinese requirements on foreign matter on U.S. soybeans, and the current trade environment, are expected to help Brazil support higher exports to the Chinese market¹⁴. New export routes from Miritituba to Barcarena and Santarem added a new northern gateway for soybeans (and corn) exports from North Mato Grosso to China, Europe, the Middle East, and Mexico. These new export routes have shifted the transportation dynamics in Brazil. With the continuation of the economic recovery in Brazil as well as export demand, soybean consumption will keep increasing. That will support higher domestic consumption of meat. Brazil's feed sector continues to use soybean meal as the second most important ingredient for animal feeding. Besides, Brazil is also considering a higher blending biodiesel mandate in 2019. Brazil has an estimated crushing capacity of 62 MMT, of which 70 percent of it is expected to be utilized next year¹⁵. That will support high production of soybean oil and meals in the future.

In Russia, sunflower seeds are the primary oilseeds. But the soybean production grew very fast. The share of sunflower seeds in the total production of three main oilseeds fell from 88 percent in 2000 to 66 percent in 2017. Soybean and rapeseed production increased tenfold during that time outpacing sunflower seeds. Good export demand, increasing crushing capacity and the developing animal husbandry sector are driving factors for the diversification and increased production of oilseeds production in the Russian Federation. In 2007, the sunflower seeds accounted for 77.10% of total oilseeds' planted area and soybeans only 11.16%. While in 2016, the soybeans' share increased to 18.11% and sunflower seeds' share decreased to 61.77%. Historically the main soy producing area was the Russian Far East due to favorable climate. In 2007, the Far Eastern FD provided 64 percent of total Russian soybean production, which was only 652 TMT. In 2016, soybean production increased to 3135 TMT. The Far East produced 1320 TMT (42.11%), the Central area produced 1226 TMT (39.11%)¹⁶. Soybean area doubled in the Far East FD, from 549,000 HA in 2007 to 1.13 million HA in 2016. Of that, Amur oblast saw soy planted area increase

¹⁴ GAIN Report, No. BR1806, Oilseeds and Products Annual_Brasilia, Brazil, 3-28-2018, USDA, FAS

¹⁵ GAIN Report, No. BR1806, Oilseeds and Products Annual_Brasilia, Brazil, 3-28-2018, USDA, FAS

¹⁶ Source: Rosstat

from 313,000 HA to 939,000 HA. The main market for the Far East is China. Regional and local consumption is limited by crushing capacity and an undeveloped animal husbandry sector. Post expects production in the Far East to continue to grow but could be limited by land productivity or by profitability¹⁷.

India is a net exporter of soybeans. Trade in soybean has grown, but at a slower pace in the last 6 years. Prior to that trade was negligible, except in 2009 when some trade was reported. In recent years, India has imported soybeans from Benin, Ethiopia, Togo, Malawi, Mozambique and some quantity of Identity Preserved food-grade U.S. No. 1 Non-GMO soybeans from United States (656 MT, \$588,131 in MY 2016/17); these imports were mostly for food use. India also exported soybeans (non-GM) to the United States, Canada, Spain, Belgium, France, and Germany. India's organized feed industry primarily uses soy meal, as well as peanut, sunflower seed and rapeseed meal in various formulations. In addition to animal feed use, oil meals like soymeal are increasingly used in processed food products, healthcare products, and also as low-cost high-protein supplements. India's per capita consumption is currently estimated at 18 kg, still below the world average per capita consumption estimated at 25 kg. India's demand for vegetable oils is strong. With the gap between forecast demand (24.8 MMT) and production capacity (7.5 MMT), more oil will be imported. A strong demand from bulk buyers, food business operators, households, and a fast moving, younger consumer generation with more disposable income is pushing consumption growth in India¹⁸.

South Africa demonstrated a positive trend in oilseeds plantings the past 10 years, mainly driven by increased soybean plantings. The soybean acreage increased to 775 thousand hectare in 2017 from 574 thousand hectare in 2016 (+35.02%). In spite that yield decreased by 21.34% (from 2.3 MT/ha in 2016/17MY to 1.8 MT/ha in 2017/18 MY), total production was 1.375 MMT which was 59 TMT more than production in 2016/17 MY¹⁹. South Africa expanded its soybean processing capacity to replace soybean meal imports. As a result of this demand pull, the area planted with soybeans in South Africa almost doubled the past 10 years. In the

¹⁷ GAIN Report, No. RS1810, Oilseeds and Products Annual_Moscow, Russia, 3-19-2018, USDA, FAS

¹⁸ GAIN Report, No. IN8040, Oilseeds and Products Annual_New Delhi, India, 4-18-2018, USDA, FAS

¹⁹ Source: South African Grain Information Services (Sagis)

2016/17 MY, South Africa imported small amounts of soybeans (28,000 tons) and sunflower seed (2,000 tons), mainly from Zambia and Malawi²⁰.

4. Impact of U.S.-China Trade Dispute on China's soybean sector

U.S. soybean imports have declined. Correspondently, Brazil soybean imports has increased. However, the large volume of China's import determined that China isn't a price taker. Stopping importing soybean from United States will impact global soybean trade obviously and deeply. China's soybean traders' transferring to Brazil has increased Brazil's soybean price at the early months of this year. Increasing price induced by China's huge import demand motivates Brazil and Central Asia's "Belt and Road" countries to increase soybean production. This will help to release China's demand pressure in the long term. However, China has to deal with its short-term supply gap. Currently, Chinese government are taking several actions to cope up with the forthcoming shortage of soybean supply. Firstly, increase domestic soybean acreage so as to increase domestic production. Some encouragement subsidies have been carried out in the May. Secondly, expand the import of oilseed oils, meals as well as animal husbandry products. Thirdly, strengthen the research on feed formula to reduce the dependence on soybean meal demand.

4.1 Old suppliers v.s. new friends

China can keep importing soybean from its old friends. After adding importing tax, prices of United States' soybean will increase and keep lose comparative advantages compared with Brazil. As a result, Brazil is heavily competing with U.S. soybeans and is expected to continue to take away market share from the United States in 2018. The higher protein levels of Brazilian soybeans, the additional Chinese requirements on foreign matter on U.S. soybeans, and the current trade environment, are expected to help Brazil support higher exports to the Chinese market. New export routes from Miritituba to Barcarena and Santarem added a new northern gateway for soybeans (and corn) exports from North Mato Grosso (MT) to China, Europe, the Middle East, and Mexico. These new export routes have shifted the transportation dynamics in Brazil.

China also keep looking for new suppliers actively. Russia is preparing to supply up to 100,000 tons of grain and 300,000 tons of soybeans to the Chinese market,

²⁰ Oilseeds and Products Annual_Pretoria, South Africa, 3-28-2018, USDA, FAS

and will provide 1 million hectares of arable land in the Far East Federal District for Chinese farmers. Since China no longer purchased US soybeans, Russian soybean imports have soared. From July 2017 to the end of May 2018, China purchased record-breaking 850,000 tons of soybeans from Russia. Recently, an officer of Russian stated that it is preparing to increase grain production by eight times, soybeans by one time. However, such imports are still not enough for China. Therefore, the attentions of Chinese farmers are attracted by the large amount of cheap arable land in Russia's main soybean growing areas. Several companies in China have discussed cooperation intentions with Russia.

Chinese Council Tariff Commission issued a notice stating that since July 1 this year, the trade of Asia-Pacific (601099) has been applied to imported goods originating in Bangladesh, India, Laos, South Korea and Sri Lanka. In the tax reduction list, soybean products in this countries fell from 3% to zero, and other agricultural products and aquatic products also achieved tariff reduction. At the critical moment of the Sino-US trade game, this will undoubtedly help reduce China's sanctions costs and expand China's diversified import channels.

China and Ethiopia signed the Protocol of the Ministry of Customs of the People's Republic of China and the Ministry of Agriculture and Livestock Resources of the Federal Democratic Republic of Ethiopia on the Phytosanitary Requirements for Ethiopian Soybean Export to China. The signing of the protocol marks that Ethiopian soybeans can be officially exported to China. According to the General Administration of Customs, Ethiopia is a big agricultural country in Africa. In recent years, the soybean planting industry has grown rapidly and is a new exporting country of soybeans. The opening of Ethiopian soybean imports will play an active role in strengthening the trade of agricultural products between China and Egypt, enriching China's imported soybean source market and meeting domestic industrial demand. At present, soybeans grown in Ethiopia are non-GM soybeans, with an oil yield of about 18%, slightly higher than 17% of China's domestic soybeans.

4.2 Importing v.s. producing

The increasing price of Brazil soybean let China realized that importing is still a risky way to ensure supply. During the April period of this year, China's soybean crushing enterprises turned to Brazil to purchase soybeans, resulting in the Brazilian soybean export premium offer of up to 100 cents (that is, more than 100 cents above the CBOT price). Then, with the depreciation of the Brazilian currency and the easing of trade relations between China and the United States, prices have once again taken over. Recently, truck drivers in Brazil asked the

government to lower oil prices and increase freight prices, which has led to Brazilian soybean prices by about 90 cents. The previous strikes have also caused many ports to have insufficient supplies to ship at present. Brazilian truck drivers firmly occupy the dominant position in the logistics market. About 60% of the country's goods depend on trucks for transportation. Soybeans, as Brazil's most important export commodities, are also affected by trucks every year. Bringing uncertainties to the export market.

For China, it's more reliable to support its domestic demand by domestic supply. China is currently conducting pilot projects to increase soybean acreage in the Northeast. It is understood that Heilongjiang Province will add 5 million mu of soybean area this year. On the basis of the 11.5 million mu rotation pilot project, another 2 million mu of cultivated land will be added for pilot expansion of soybeans, and Jilin Province will also expand soybean acreage this year.

To reconstructing China's soybean industry is challenging. Firstly, Affected by planting benefits, most of China's soybeans are cultivated in areas with poor cultivated land quality or insufficient light and heat conditions. Good plots, gulls and seasons are mostly used to grow high-yield food crops and cash crops such as corn and rice. The rotation system is not standardized, and soybean soil-borne diseases are heavier, affecting yield and quality. In the southern region, soybean is a secondary crop in the intercropping system and has a poor growing environment. As a result, China's soybean yield is low. Secondly, the main reason is that the scale of farmland of bean farmers is too small. It is still difficult and unstable to truly expand the scale of cultivated land. The rent has been increasing year by year. The rent in many places in China has risen to 800-1000 yuan per mu per year, which is extremely unsuitable for grain production, which is not conducive to the sustainable development of soybean production. Thirdly, policy environment plays an extremely important role in the development of China's soybean industry. Among them, grain is clearly the core of policy protection and support, which makes soybeans at a relatively disadvantageous position. Fourthly, for a long time, the research funding invested by China in soybean research is much lower than other major crops, and far lower than other advanced soybean research countries. Due to insufficient investment, the number of soybean research teams are relatively small. China has less cooperation with foreign institutions in the field of soybean research and has failed to effectively use international scientific and technological resources. China's current soybean yield is still at a low level, relying on a large number of traditional smallholder production methods.

4.3 Evaluation on diversified import

It takes time to developing new trade relationship and increasing domestic production. China has to supplement its consumption gap by importing more. 3.3 million tones U.S. soybeans. This amount of soybeans is equivalent too 6500 thousand tones soybean oil and 26000 thousand tones soybean meal. Assuming that China's importing of vegetable oil, vegetable meal and animal husbandry products has little impacts on the world's price, we calculated the import amount of substitute products based on Hiau Looi Kee's research on import elasticities.

4.2.1 Potential substitutes for soybean oil

To supplement the soybean oil gap, China can import 5100 thousand tones vegetable oil from other countries instead of United States. In 2016/17, the global palm oil production is 65 million tons, the export is 49 million tons (China imports 4.9 million tons), the inventory is 9 million tons, the palm oil import price elasticity is 0.67-0.87, and the 2017/18 China can increase the import by 2 million tons.

Table 5 Estimated import substitutes of United States' soybean: 1000 tones

categories	Importing substitute products & Import amount				World export amount
Soybean oil 6500	Palm oil	2000			49000
	Rapeseed oil	300			4400
	Soybean oil	500			10000
	Sunflower oil	2000			10400
	Other oil	300			
			Soybean	5000	90000
			Rapeseed	1000	1600
			Peanut	200	3700
Soybean meal 26000	Oil gap	1400	Sunflower seeds	200	2400
	Soybean meal	7000			65000
	Swine	1000			8300
	Broiler	1000			11000
	Beef and by-products	2000			9000
	Soybean meal gap	12000			

Notes: calculated by the author.

In 2016/17, global rapeseed oil production was 28 million tons, exports were 4.4 million tons (China imported 700,000 tons). Stocks were 4.3 million tons. Rapeseed oil import price elasticity was 1.5. In 2017/18, China could increase imports by 300,000 tons. In 2016/17, global soybean oil production was 54 million tons, and exports were 10 million tons (not counting US exports of 1 million tons, China imported 700,000 tons), stocks of 3.5 million tons, and soybean oil import price elasticity of 0.76-0.92, 2017/18. China can increase imports by 500,000 tons.

In 2016/17, the global sunflower oil production was 18.2 million tons, the export was 10.4 million tons (China imported 470,000 tons), the total stock was 1.6 million tons. The sunflower oil import price elasticity was 3.47-14.76. So China could increase imports by 2 million tons. Using the above method, we measured China could increase peanut oil, cottonseed oil and olive oil imports by 0.6 million tons, 16,000 tons and 270,000 tons, respectively.

4.2.2 Potential substitutes for oilseeds

Through the above calculations, we still have 1.4 million tons of oil gap in 2017/18, and we need to make up for it by importing oilseeds. Assuming that China's increased import of various oils has little impact on world prices (5%), China can import 5.4 million tons of oilseeds from other countries in the world (not including the United States), and process them into 1.3 million tons oil, which helps to fill the oil gap calculated above. Excluding the US soybean factor, the global soybean production in 2016/17 is 230 million tons, the export is 90 million tons (China imports 62 million tons), and the soybean import price elasticity is 0.9. In 2017/18, China can increase imports by 5 million tons.

The global rapeseed production was 71 million tons, the export was 16 million tons (China imported 4.2 million tons), the stock was 5.4 million tons, and the rapeseed import price elasticity was 0.9. In 2017/18, China could increase imports by 1 million tons to produce of 300,000 tons of oil and 600,000 tons of rapeseed meal. In 2016/17, the global peanut production is 43 million tons, the export is 3.7 million tons (China imports 240,000 tons), the stock is 2.3 million tons. The peanut import price elasticity is 1. In 2017/18, China can increase imports by 200,000 tons, and can produce 10 Tens of tons of oil and 100,000 tons of peanut meal. In 2016/17, the global sunflower seed production is 48 million tons, the export is 2.4 million tons (China imports 60,000 tons), the inventory is 2.8 million tons, the sunflower seed import price elasticity is 0.6-0.9. China can increase imports by 200,000 tons. It can produce 100,000 tons of oil and 100,000 tons of sunflower seed meal.

4.2.3 Potential substitutes for animal husbandry products

The import of 26 million tons of soybean meal converted from US soybeans is of vital importance to China's animal husbandry. We need to switch from soybean meal exports to imports and import some livestock products. In addition, the imported oil can be converted into 4.8 million tons meal. In 2016/17, the global soybean meal production was 230 million tons and the export was 65 million tons. China's soybean meal imports 50,000 tons and exports 1.1 million tons. At present, Brazil's soybean meal consumption balance is more than 10 million tons. Soybean meal production will continue to grow with soybean production. It will increase China's soybean meal imports and provide 6 million tons of imported space for China. If it does not maintain exports, it will increase the total soybean meal by 7 million tons.

In 2016/17, global production was 110 million tons, and exports were 8.3 million tons (China imported 2 million tons). Overall, global supply and demand is loose and is expected to continue. The price elasticity of fresh frozen is 0.6-1.8, which can increase the import of 1 million tons. The import of these can reduce consuming 700,000 tons of soybean meal. In 2016/17, the global broiler production was 90 million tons and the export was 11 million tons. According to FAO's forecast, the output of large chicken breeding countries such as Brazil will increase by 22% in the next 10 years, and its export volume will exceed 6 million tons. The price elasticity of fresh cold chicken imports is 0.97-1.85. China can increase imports by 1 million tons and reduce consuming 600,000 tons of soybean meal. In 2016/17, the global beef production was 62 million tons, and the export volume was 9 million tons (excluding 1 million tons in the US and 970,000 tons in China). The price elasticity of beef imports is 4.74. From the perspective of world beef production and sales, India and Brazil can provide 2 million tons of beef for China's increased imports, which can reduce consuming 1 million tons of soybean meal.

5. Impact of U.S.-China Trade Dispute on BRICS Countries' Trade Relations

China's diversified import strategies will induced new demands for other commodities. For the soybean, China has taken actions to seek new suppliers. Besides, the trade dispute taught China that it's important to construct stable supply channels. As an important approach to consolidate trade relation, the overseas agricultural investments may increase in the future. But in the short term, a multi-good import strategy is more feasible. This may restructure current trade relations of oilseeds, oil, meal and meat.

5.1 Oilseed oil

As estimated before, China will have 6500 TMT soybean oil gap. If substituted with other kinds of oilseed oils, China needs 2000 TMT palm oil, 300 TMT rapeseed oil, 500 TMT soybean oil and 2000 TMT sunflower oil.

For the palm oil, BRICS countries are not the main producing countries in the world. Its production concentrated on the Southeast Asia and Africa, especially in Indonesia and Malaysia. But India and China are top 3 palm oil importers. In 2016, total palm oil export was 46.4 MMT, of which Indonesia provided 25.0 MMT and Malaysia provided 17.0 MMT. India imported 9.0 MMT, E.U. imported 6.7 MMT and China 5.0 MMT. Additional 2 MMT demand from China may be satisfied by Southeast Asia production and won't change the current trade pattern.

The trade relation of rapeseed oil is similar to palm oil. China and India are the top 2 rapeseed oil importer, accounting for 16% and 10% of global imports. In 2016, global rapeseed export was 4235 TMT. China imported 700 TMT and India imported 440 TMT. Additional 300 rapeseed oil import increases the China's import by 42.9%. This amount can be digested by increasing production (see Table 6).

Table 6 Oilseed oil export in 2017: 1000 tones

Oilseed oil	Brazil	Russia	India	China	South Africa	BRICS	The rest of world	Import need of China
Palm oil	55	25	0	20	17	117	49181	2000
Rapeseed oil	0	333	0	20	0	353	4235	300
Soybean oil	1525	570	2	135	50	2282	7733	500
Sunflowerseed oil	0	2250	0	0	50	2300	7446	2000
Other oil	53	0	27	13	8	101	2957	300

Sources: USDA

China can import soybean directly. Additional demand for soybean oil is 500 TMT and can be satisfied easily. The global production of soybean oil was 7733 TMT and BRICS was 2282 TMT in 2017. Brazil's production was 1525 TMT, triple of the amount China needs. With the crushing ability increasing in soybean producing countries, it's likely to strengthen trade relation of soybean oil between China and Brazil.

The amount of additional sunflowerseed oil is as same as palm oil. Most of them can be filled with Russia. Export of Russia accounted for 30.89% of global export and almost all the BRICS countries. But China's additional amount is large enough to reshape the trade relations. Rapeseed oil production and trade will be motivated by such a large demand.

5.2 Oilseeds

Although oil import can make up for the majority of China's soybean oil gap, China still have 1400 TMT oil gap. This part can be filled by importing oilseeds directly. Considering that China will import oilseeds to produce oil, China needs to import additional 5000 TMT soybean, 1000 TMT rapeseed, 200 TMT peanut and 200 TMT sunflower seeds.

Under this ideal situation, China only needs additional 5 MMT soybean import. It's not a very burden to the world. Among BRICS countries, Brazil is most likely to offer this supply. China's trade and processing pattern can't change in the short run, Brazil and China will maintain a close trade relation.

For the rapeseed, only Russia export 260 TMT in 2017. Other BRICS countries are net importer. China's additional 1000 TMT demand can only be satisfied by the rest of the world. In 2017, the non-BRICS countries total export was 14,629 MMT, which is almost 15 times of China's need. This proportion may not change the current trade pattern.

For the peanut and sunflower seeds, China can cut down on export to meet increasing domestic needs. India exported 720 TMT peanut in 2017, ranking first in BRICS countries. China was the second with 720 TMT export. This amount are over triple of the additional 200 TMT needs. In 2017, China exported 380 TMT sunflower and the largest sunflower seed exporter in BRICS countries. Russia was the second with 110 TMT export. It's not difficult for China to cover its additional sunflower seed need by its own production.

Table 7 Oilseeds export in 2017: 1000 tones

oilseeds	Brazil	Russia	India	China	South Africa	BRICS	The rest of world	Import need of China
Soybean	74650	800	250	150	5	75855	19638*	5000
Rapeseed	0	260	0	0	0	260	16218	1000
Peanut	253	6	850	720	20	1849	14629	200

Sunflower seeds	0	110	5	380	1	496	15982	200
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Sources: USDA

Notes: * soybean export of the rest world minus the export of United States.

5.3 Oilseed meal and meat

China needs soybean meal produced by U.S. soybean to support its breeding industry. The soybean meal gap is quite large which is about 26 MMT. Under current trade relations, China can import 7 MMT from the world, whose total export was 65 MMT. For the rest part, China can import meat direct from other countries. Based on above estimation, China needs to import additional 1 MMT swine, 1 MMT broiler and 2 MMT beef.

Table 8 Meat export in 2017: 1000 tones

Meat	Brazil	Russia	India	China	South Africa	The rest of world	BRICS	Import need of China
Swine	593	51	1	27	9	6942	681	593
Broiler	4020	240	4	163	66	6545	4494	4020
Beef	220	0	80	46	6	9617	352	220

Data sources: USDA, U.S.

Broiler meat export of BRICS countries can cover the demand of China. Brazil provided 4.02 MMT broiler meat in 2017, while other countries only exported 0.41 MMT. China's additional broiler needs accounting for one fourth of Brazil's total exports. Increasing crushing capacity in Brazil will support the broiler breeding industry, which also helps to strengthen the trade relations with China. For the swine and beef, China can't import them from BRICS countries directly. In 2017, BRICS countries' swine export was 681.01 TMT, 70% of China's additional broiler meat needs. And BRICS countries' beef export was 352.04 TMT, only 17.6% China's beef needs.

5.4 Overseas agricultural investment

To secure market access for soybeans and other agricultural commodities, controlling distribution channels and ensuring transportation infrastructure is more dependable. Taking the ABCD quartet as example, ADM, Bunge, Cargill, and Louis Dreyfus has dominated global grain processing and trade markets by investing on agricultural infrastructures and processing industry. China carried out the "going-out" (zou chu qu) strategy in 2000 to encourage overseas investments.

After U.S.-China trade dispute this year, China may take actions to enhance the source security of its overseas agricultural commodities.

Tight natural resources constraints made China to rely on agricultural commodity imports. Without imports, China would need to plant an additional 70 million hectares of soybeans to obtain soybean meal and oil output equivalent to its imports. This will significantly decrease the production of other three major crops. So going out to seek more suppliers are necessary for China.

The investment and finance relations between China and other BRICS countries will be closer in two directions. The first direction is the processing and transportation infrastructure. Since 2009, China has scaled up its financial lending to the energy sector and industrial line infrastructure for soybean processing in Brazil since 2009. Total amount is nearly USD\$ 20 billion. In Argentina, the neighborhood of Brazil, China loaned USD\$ 10 billion to invest in production and infrastructure at below market rates, in exchange for guaranteed contracts for construction by Chinese companies and/or a commitment to sell the goods produced to China at a set price. This kind of investment is more likely to happen and increase in old suppliers, such as Brazil. Here the plantation is mature enough and agricultural resources have been developed deeply.

The second direction is developing overseas plantation in other countries. After China imposing extra tax on U.S. soybeans, officers of Russia announced that they offered over 1 million hectare arable lands in Far East region to foreign investors. Half of these lands are estimated to be rent by Chinese people to plant soybean. If this happened, this area will provide 500-800 TMT soybeans to China annually. Investments of processing industry are also allowed. For example, a joint venture between companies including Heilongjiang Agriculture Co. and Joyvio Group, will invest \$100 million to build a soybean crusher and grain port in Russia in following three years. They will also lease 100,000 hectares of farmland in Russia to grow wheat, corn and soybeans.

6. Concluding remarks

To fill the 3.3 MMT U.S. soybeans gap, China can find multiple suppliers directly. However, China are more likely to fulfill its demand by diversifying import. For example, importing soya meal, soybean oil, and broiler instead from other countries. Based on estimation, China can import extra 5.1 MMT oilseeds oil (including 2 MMT palm oil, 300 TMT rapeseed oil, 500 TMT soybean oil, 2 MMT sunflowerseed oil and 300 TMT other oil), 5.4 MMT oilseeds (including 5 MMT soybean, 1 MMT rapeseed, 200TMT peanut and 200 TMT sunflower seeds), 7

MMT soybean meal and 4.83 MMT meat (including 593 TMT , 4.02 MMT broiler and 220 TMT beef). Within China, the Chinese government has taken actions to boost domestic production. The restruction of China's soybean industry is undergoing. In order to ensure stable supply, China's overseas agriculture investment and cooperation will increase too.

Additional imports will strengthen the soybean trade relations with Brazil. Other trade relation with the potential production countries, such as Russia, are developing. Except for soybean, diversified imports will impose opportunity to BRICS countries to connect each other more deeply in seeds oil and meat trade. As the main exporter of soybean oil and sunflowerseed oil, India and Russia's trade orders from China may increase. And the China's broiler trade with Brazil may be tighter. To ensure stable imports, China will enhance the overseas agricultural investments. Not only processing and transportation, but also plantation will be the core of China's future overseas agricultural investment strategy.

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