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Uncover the Causes of China's Low Utilisation of Grain TRQ [1]

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Abstract

Since China's accession to the WTO in late 2001, China's utilisation of grain TRQs (tariff-rate quotas) has been very low, being only about 12 per cent on average during 2002-08. This is in sharp contrast to anticipations of many analysts who believed that China's grain imports would grow significantly after its WTO accession. This paper examines China's management of grain TRQs and analyses why the grain TRQ utilisation is low. Our study shows that the primary cause for the low utilisation of the TRQ has been due to comfortable domestic supply situations, thanks to policies promoting domestic supply. Whether China's grain TRQ usage will increase and how its grain trade policy will evolve in the future will continue to be affected by domestic grain supply and demand, and also by the outcomes of bilateral and multilateral free trade negotiations.

Keywords: WTO, China, tariff-rate quota, grain trade

1. Introduction

In December 2001, China was accepted to the World Trade Organisation (WTO). Many anticipated that, following China's accession to the WTO, its grain imports would increase rapidly. To mitigate the likely strong shock on Chinese grain producers' income and its grains industry, China was allowed a 'transition period' of a few years. During this transition period, China's grain imports would be managed under a TRQ (tariff-rate quota) arrangement. That is, if the imports are within the quota, a lower in-quote tariff will

be charged; otherwise, a much higher out-quote tariff applies. The higher above-quota tariff would discourage imports and thus would provide protection to Chinese farmers and its grains industry.

Almost sever years have passed since China became a member of the WTO. Then, what has happened to China's grain trade under the TRQ arrangement? How did China implement the grains TRQ? Were China's TRQ practices in alignment with WTO rules? Such questions have continuously drawn much interest from grain traders and many international observers. Australia, as a major grain exporter, has also paid much attention to look for answers to such questions.[1] So far, however, little effort has been made to examine China's grain TRQ implementation and management. This study attempts to fill this gap.

In the next section, we first provide an overview over the developments in China's grain trade and its trade policies since 2001. This is important because an understanding of China's grain TRQ practice must be placed in the broader context of issues that affect China's grain imports and grain trade policies. In Section 3, we highlight China's grain TRQ implementation and management. Section 4 is devoted to examine the factors that affect China's grain TRQ utilisation and explain why China's grain TRQ utilisation is low. Section 5 discusses the prospects of China's grain TRQ practices as well as the likely trade policy developments. The last section concludes the paper.

2. Developments of China's Grain Trade and Trade Policies since 2001

2.1 Grain Trade

Since 2001, China's grain trade (not including soybean) followed no clear pattern.[2] The amount of imports, exports as well as net imports changed between years, and often abruptly (see Table 1). If soybean is included, total grain imports show a trend of increasing while total grain exports tend to change between years.

Table 1. China's Grain Trade, 1990-2007 ('000 t)

Part A: Imports

	Imports by Crops					Total Imports	
	Wheat	Rice	Barley	Corn	Soybean	Without Soybean	With Soybean
1990	12527	59	652	369	31	13693	13724
1991	12370	140	764	1	1	13449	13450
1992	10581	104	829	0	121	11625	11746
1993	6420	100	774	0	99	7422	7521
1994	7300	520	1318	1	52	9148	9200
1995	11590	2000	1274	5181	1744	20516	22260

1996	8250	760	1308	440	2988	11122	14110
1997	1860	359	1800	3	6260	4170	10430
1998	1490	240	1520	250	3200	3880	7080
1999	450	170	2270	0	4890	3390	8280
2000	880	240	1970	0	10930	3150	14080
2001	690	270	2370	0	13990	3440	17430
2002	600	240	1910	8	11321	2849	14170
2003	430	371	1360	1	20742	2191	22933
2004	7260	770	1710	0	20230	9750	29980
2005	3538	522	2179	4	26591	6272	32863
2006	613	730	2140	65	28270	3548	31818
2007	101	487	913	35	30821	1536	32357
2008 (1-9)	9	248	933	17	28695	1232	29928

Part B: Exports

	Exports by Crops					Total Exports	
	Wheat	Rice	Barley	Corn	Soybean	Without Soybean	With Soybean
1990	7	326	0	3404	940	5311	6251
1991	0	690	0	7780	1196	10860	12056
1992	3	953	1	10314	658	12983	13641
1993	291	1430	0	11100	730	14620	15350
1994	268	1520	0	8740	1980	13050	15030
1995	225	50	0	115	298	1842	2140
1996	565	270	0	160	260	1790	2050
1997	458	940	0	6610	210	8920	9130
1998	270	3750	0	4690	170	9360	9530
1999	164	2710	10	4310	200	8190	8390
2000	188	2950	0	10470	210	14350	14560
2001	713	1860	0	6000	250	9480	9730
2002	699	1990	0	11670	280	15680	15960
2003	2514	2610	0	16391	270	24103	24373
2004	1089	910	0	2320	330	4730	5060
2005	605	686	4	8642	413	9761	10175
2006	1509	1253	6	3099	395	5867	6262
2007	3073	1343	118	4918	475	9452	9927
2008 (1-9)	272	827	8	187	376	1544	1920

Part C: Net Imports

	Net Imports by Crops					Total Net Imports	
	Wheat	Rice	Barley	Corn	Soybean	Without Soybean	With Soybean
1990	12520	-267	652	-3035	-909	8382	7473
1991	12370	-550	764	-7779	-1195	2589	2590
1992	10578	-849	828	-10314	-537	-1358	-1895
1993	6129	-1330	774	-11100	-631	-7198	-7829
1994	7032	-1000	1318	-8739	-1928	-3902	-5830
1995	11365	1950	1274	5066	1446	18674	20120
1996	7685	490	1308	280	2728	9332	12060
1997	1402	-581	1800	-6607	6050	-4750	1300
1998	1220	-3510	1520	-4440	3030	-5480	-2450
1999	286	-2540	2260	-4310	4690	-4800	-110
2000	692	-2710	1970	-10470	10720	-11200	-480
2001	-23	-1590	2370	-6000	13740	-6040	7700
2002	-99	-1750	1910	-11662	11041	-12831	-1790
2003	-2084	-2239	1360	-16390	20472	-21912	-1440
2004	6171	-140	1710	-2320	19900	5020	24920
2005	2934	-164	2176	-8638	26177	-3489	22688
2006	-896	-523	2134	-3034	27875	-2319	25556
2007	-2972	-856	795	-4883	30346	-7916	22430
2008 (1-9)	-264	-580	925	-170	28319	-312	28007

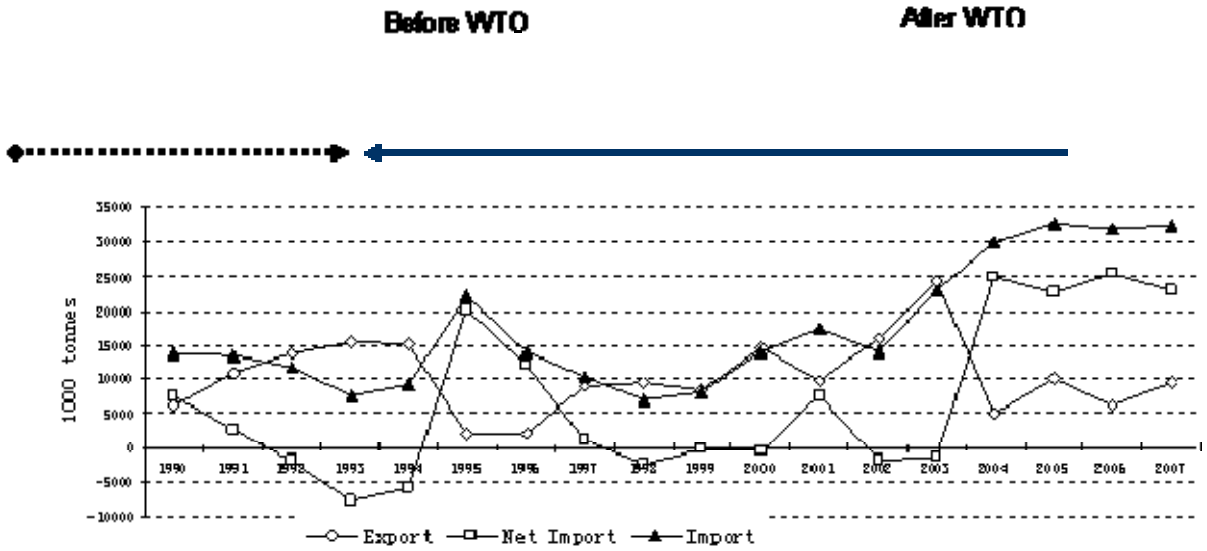
Source: Ministry of Commerce, Monthly Bulletin of Chinese Agricultural Import and Export Statistics.

At the crop level, while the level of soybean export has been stagnant, its import has increased rapidly in the past few years (see Parts A and B of Table 1). Soybean imports account for a major proportion of China's total grain imports; around 80-90 per cent. China's barley trade is one way: it imports a relatively large amount of high quality barley chiefly for brewing purposes. China was able to net export a significant amount of corn even after joining the WTO. However, the level of export has declined rapidly in the recent years. China has been a net rice exporter but its export level has dropped since 2003 (see Part C of Table 1). Over the past seven years, China's wheat trade has been most erratic. In 2002, the first year after China's joining the WTO, China was a net wheat exporter although the volume was small. The net wheat export in the following year, 2003, however, was significant, being over 2 mt. This was followed by a dramatic net wheat import increase in 2004 to be about 6.5 mt. It dropped to about 3 mt in 2005. In 2006, China was again net-exporting wheat to the world market (Part C of Table 1).

Comparing with the trade level before WTO accession, China's total grain trade (both imports and exports) since 2001 has increased (see Figure 1). During 1990-2007, the annual growth rate of grain trade was about 4 per cent. Prior to the accession, namely,

1990-2001, the growth rate was 2.8 per cent with an annual average trade volume being 22 mt. Since 2001, the growth rate has jumped to about 7 per cent with an annual average trade volume being about 38 mt.

Figure 1. Changes in the Level of China's Grain Trade before and after WTO Accession

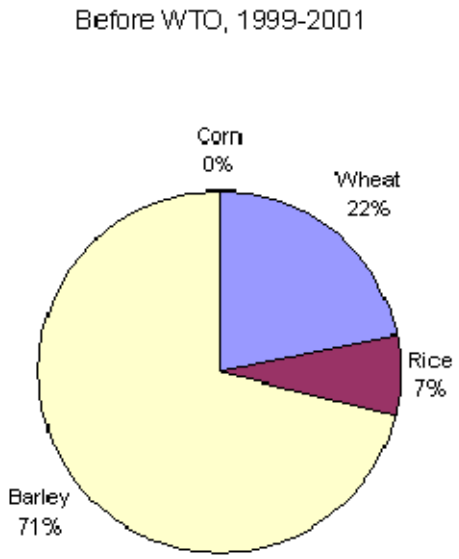


Source: Based on Table 1.

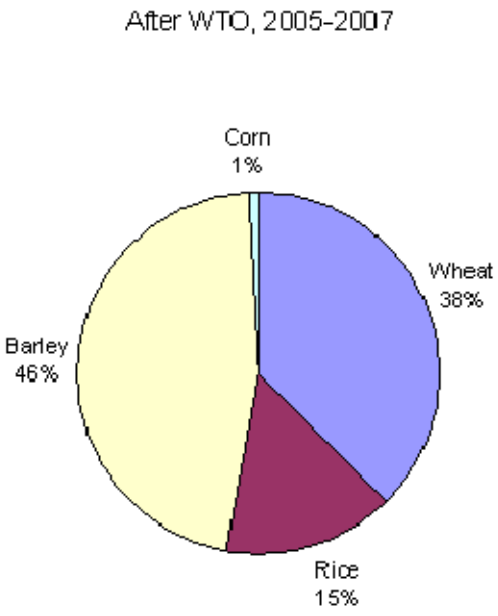
There have also been noticeable changes in the composition of grain imports after WTO accession. Excluding soybean, the proportion of wheat import has increased, from 22 per cent in 1999-2001 to 38 per cent in 2005-07 (Figure 2). The proportion of rice import has also increased. On the other hand, the proportion of barley import out of total grain imports has declined, from 71 per cent to 46 per cent. The change in the proportion of corn is relatively small. The three-year average annual grain import during 2005-2007 (3.8 mt, not including soybean) has only slightly increased compared to that of 1999-2001 (3.1 mt). However, the three-year average annual imports during other years were much higher, for example, being more than double that of 1999-2001 during 2004-2006 (6.5 mt).

The discussion above shows that China's total grain trade and grain net imports have increased after WTO accession. Thus, to some extent, China's accession to the WTO may have led to increased grain trade between China and the rest of the world. However, seven years is relatively a short time and to what extent China's increased grain trade and net imports can be attributed to WTO accession requires further research. In this regard, two issues are worth particular mention: the sharp increase in soybean import and China's pragmatic approach to grain trade. A brief account on each follows.

Figure 2. Changes in the Composition of China's Grain Trade (excluding Soybean)



Average annual import: 3.1 million tonnes during 1999-2001.



Average annual import: 3.8 million tonnes during 2005-2007.

Source: Based on Table 1.

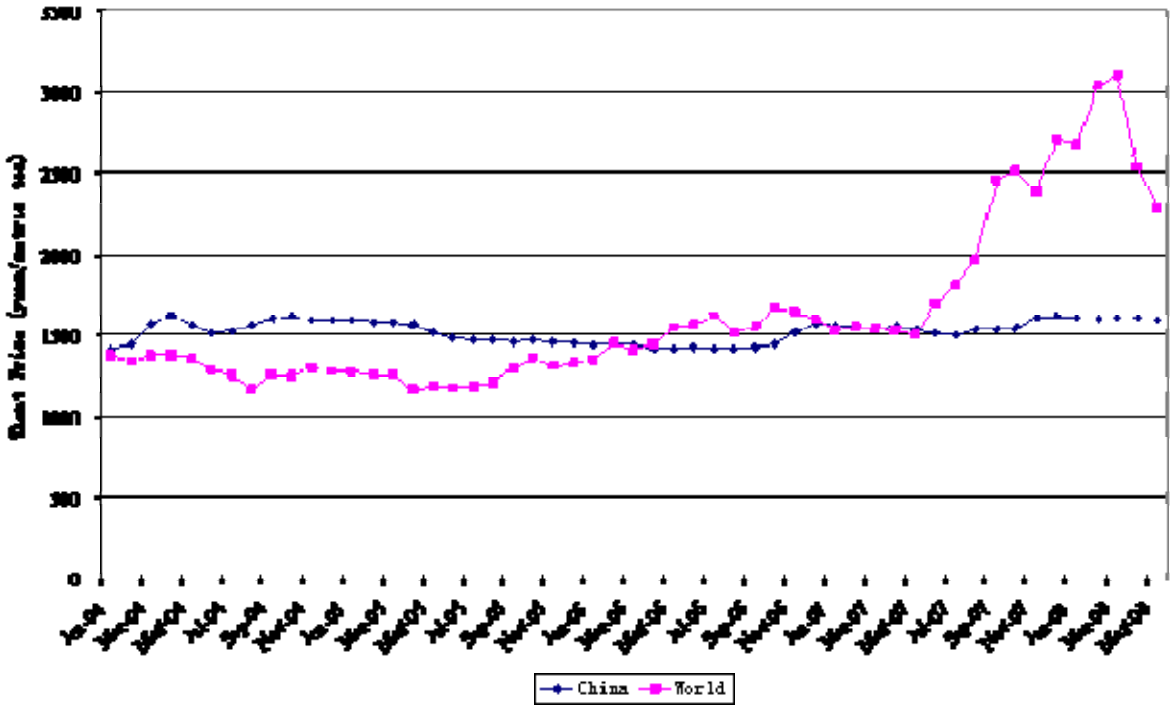
Table 1 clearly shows that China's recent grain imports are mainly due to the fast increase in soybean imports. On average, soybean imports account for over 80 per cent of total grain imports during 2002-07. Excluding soybean, China's total grain imports are relatively small (comparing with its domestic total consumption) and in fact, five out of the six years, China was a net grain exporter (Parts A and C, Table 1). Given that soybean import is no longer subject to TRQ restrictions, in the rest of the paper, our discussion will focus on other grains, i.e., major cereals – wheat, rice and corn.[3]

China follows a very pragmatic approach to its grain trade, attaching much weight to protecting producers' income and ensuring national food security. China exports or imports grains when such a need arises. A quick review of what China did since the early 1990s will explain this. In the mid-1990s, China's grain supply was believed to be in shortage. The government decided to import grains in large volumes and also took measures to promote grain production. Consequently, domestic grain output increased, and by the late 1990s and early 2000s, China had accumulated large volumes of grains. As part of the response to declining domestic prices, the government encouraged grain export (mainly corn, see Part B, Table 1) and China's net grain export increased during 2002-2003. Following grain price increases in late 2003 and early 2004, the government reduced incentives for grain exports and facilitated grain imports. In 2004, China became a net grain importer. During 2004-05 the government also took various measures to boost grain production. China's domestic production increased and in 2005, China again became a net grain exporter.

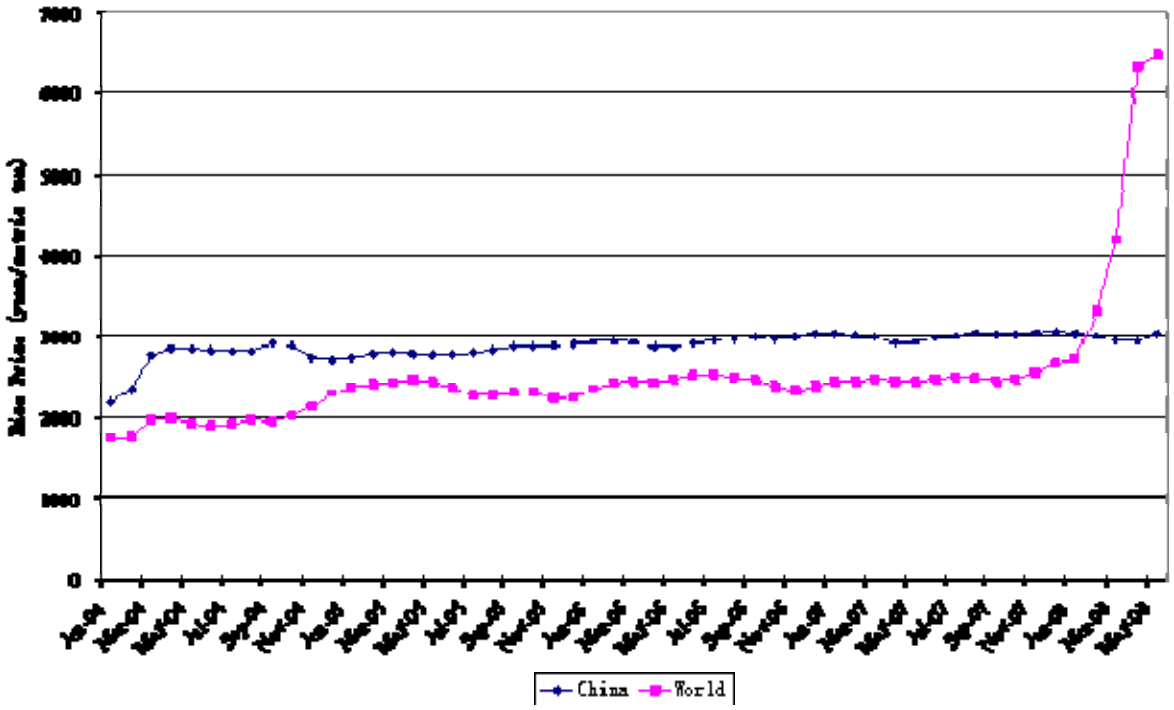
It is most interesting to note that China exported grains when world market prices were below China's domestic prices. Part C in Table 1 shows that China net exported corn, rice and wheat in all the years during 2002-2007 except for wheat in two years, namely, 2004 and 2005. Examining Figure 3, it is clear that world prices were lower than those in China for corn and rice during 2004 and 2007. The picture for wheat was slightly different: during mid-2006 and mid-2007, the world price was slightly higher than China's or similar. The world wheat price then soared afterwards. Generally, it would be expected that the directions of commodity arbitrage would be from low-priced market to higher-priced market. This, however, is clearly not the case for China's corn and rice trade. Export subsidy was largely responsible for such unexpected directions of commodity movements; this will be further addressed in the nest section. Since early 2008 (in the case of wheat, mid-2007), world grain prices turned to be higher, in some months significantly higher, than those in China. But China's grain export was reduced – due to government's serious export control, which will be further addressed in the next section.

Figure 3. Grain Prices, China and the World (2004-08)

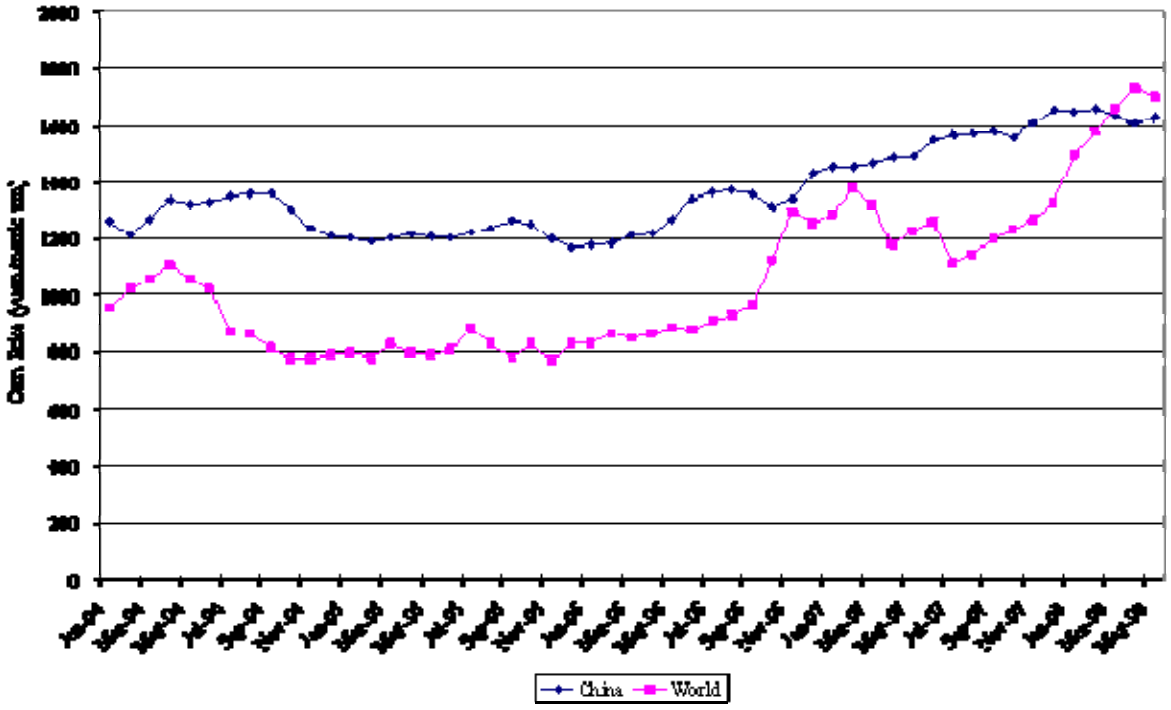
Wheat Price



Rice Price



Corn Price



Sources and notes: International grain prices (in US$) were obtained from World Bank Commodity Price. Grain prices in China were based on national average wholesale market prices from China

Agricultural Commodity Price Databank. Monthly average exchange rates between Chinese Renminbi yuan and the US dollar were used to convert the international price into Chinese yuan.

Thus, changes in China's grain imports and exports as elaborated above tend to suggest that China's grain trade is to a greater extent dependent upon its domestic demand and supply situations and on its needs for grain security but to a lesser extent influenced by WTO accession; at least this was the case for the past few years. As such, it is valuable to look into policy issues that affect China's grain demand and supply conditions which in turn affect China's grain trade practices.

2.2 Grain Trade Policy

Our discussion on China's grain trade policy developments in the past several years is mainly focused on the following three aspects: market access, export subsidy, and domestic support.

2.2.1 Market access

After WTO accession, TRQs are applied to imports of some agricultural products such as grains (wheat, corn and rice), cotton, cooking oil, sugar and wool. The imports of some other agricultural products such as soybean, barley, horticultural products and animal products are subject to a single tariff rate only. Reduced import tariff rates improved the access of foreign agricultural products to the Chinese market. In addition to the tariff rate reduction, China also made changes to import procedures of some key agricultural products that made exports of such products to China easier. For example, in 2004, wool imports were no longer confined to those designated agents but any traders could import wool. Prior to 2006, a fixed proportion of cooking oil had to be imported only by state trading enterprises (STEs). On 1 January 2006, this proportion was abolished. Thus, it can be seen that TRQs are the only means used by China to influence the access of a small number of foreign agricultural products, including grains, to the Chinese market. As far as grain exports to China are concerned, one can export as much grain as one wishes up to the quota to enjoy the very low level of in-quota tariff rates. When the quota is fulfilled, one can still export grains to China so long as one is prepared to bear the higher out-quota tariff rates. It is interesting to note, however, the utilisation of the grain TRQs in the past several years has been low. In 2004, grain import was the highest since WTO accession, being 8.02 mt. Yet total grain imports accounted for only 36 per cent of the total quota. Details about the TRQ utilisation and why the utilisation is low are given later in this paper.

2.2.2 Export subsidy

China agreed to abolish all export subsidies at the time of WTO accession. Since 2002, two measures were introduced that have had impact on China's grain exports: tax rebates on grain exports and exemption of railway construction levies for grain transportation.

Tax rebates on grain exports. On 1 January 2002, the State Council approved that a zero value-added tax (VAT) would be applied to rice, wheat and corn exports and sales tax imposed on these grains exported would be fully refunded (Ministry of Finance and State Taxation Bureau 2002). In 2003, the rate of rebates for processed products out of wheat, corn and so on was further increased, from 5 per cent to 13 per cent (Ministry of Finance and State Taxation Bureau 2003). It is noted that the use of tax rebates is allowed by WTO rules (Chen and Liu 2002). Such rebates increase China's grain export competitiveness in the world market. However, from 20 December 2007, VAT rebates were abolished. Further, a temporary grain export tariff was introduced effective from 1 January to 31 December 2008, ranging between 5% and 25%. Flours of grains could be exported only under export quota permit (Ministry of Finance 2007a and 2007b). Changes in export support was meant to discourage grain exports so that domestic grain prices could be kept low, thus helping curb the rising inflation. In 2008, China's grain exports were reduced dramatically (see Table 1).

Exemption of railway construction levies for grain transportation. Starting from 1 April 2002, paddy and rice, wheat and wheat flour, corn and soybean were exempted from railway construction levies (State Development and Planning Commission 2002).[4] This

exemption was to be terminated by the end of 2005. However, this policy measure is currently still in use.[5] This measure significantly reduced the transportation cost of grains. According to Wu (2006), the railway construction levy accounts for about 30-40 per cent of total transportation costs of grains. Its exemption, on average, would have reduced rail transportation cost of corn by 40 per cent. This also partly explains why China exported grains while domestic prices were higher than those in the world market.

2.2.3 Domestic support

To become a member of the WTO, China committed that its domestic support to agricultural products would not exceed 8.5 per cent of the value of total agricultural production.[6] China used to milk agricultural sector and had a negative support to agricultural production (Tian et al. 2002). Consequently, there is so much room for China to increase its domestic support level. Nonetheless, its current support level was merely 0.6 per cent and was far below the level agreed at the WTO accession (Wu 2006). Despite the still very low level of domestic support, China indeed continued or initiated some measures that would directly or indirectly increase its domestic support to agricultural production.

'Abolishment of two taxes' and changes in 'three agricultural subsidies'. The two taxes abolished are 'agricultural tax' and 'taxes on special agricultural products' (excluding tobacco). Three subsidies are 'direct subsidy to grain production', 'subsidy to the adoption of improved seeds', and 'subsidy to the acquisition of farm machinery'. At the beginning of 2006, farmers nationwide were free from paying agricultural tax.[7] Since 2002, China's 'three agricultural subsidies' have increased significantly, from 0.1 billion yuan in 2002 to over 50 billion yuan in 2007 (see Table 2). Such subsidies provided incentives to farmers to produce grains and also enhanced China's grain production capacity.

Table 2. Agricultural Subsidy in China 2002-07 (b ¥)

	2002	2003	2004	2005	2006	2007
Direct subsidy	——	——	11.60	13.20	26.20	42.70
Improved seeds subsidy	0.10	0.30	2.85	3.87	4.07	6.61
Farm machine subsidy	——	0.04	0.07	0.30	0.60	2.00
Total	0.10	0.34	14.52	17.37	30.87	51.31

Note: — data do not exist or are not available.

Source: Calculated by authors from publications by the Ministry of Finance (2007).

Continuation of grain procurement under minimum support prices. In the early 1990s, China introduced a minimum support price (MSP) scheme for grain procurement. After WTO accession, in order to protect the income of farmers in major grain producing regions, this MSP measure was continued, mainly for paddy and wheat. In 2005, the MSP was effective for rice. In 2006, the government also procured wheat under MSP. MSP provides assurance to grain producers and encourages farmers to produce grains.

Assistance to agricultural insurance. In June 2006, agricultural insurance was included as part of China's broad agricultural support system. It was made clear that subsidies would be provided to farmers, insurance companies, and agricultural re-insurance efforts. The funds would come from both the central and local governments. Through the insurance assistance, the government provides indirect support and protection to the farmers. Subsidy to agricultural insurance falls into the 'Green Box' as allowed by the WTO. Many developed countries also make use of such a subsidy as a means to provide support to their agricultural production.

3. China's Grain TRQs: Implementation and Management

Imports of three major grains, i.e., wheat, rice and corn, are subject to TRQs after China's WTO accession. The tariff rates for in-quota imports are low, being 1 per cent for raw grains, and less than 10 per cent for processed grain products. Tariff rates for out-quota imports are much higher. The Chinese government promised to make reforms and adjustments to grains trade over the following years after the accession in 2001. More specifically, proposed major changes include: (1) reduce the out-quota tariff rates for grains subject to TRQs (from 74 per cent in 2001 to 65 per cent in 2004); (2) increase TRQs (for wheat, corn and rice, from 8.468 mt, 5.85 mt and 3.99 mt in 2002 to 9.636 mt, 7.2 mt and 5.32 mt in 2004, respectively); and (3) reduce the proportion of corn imports designated to STEs and increase the proportion to be traded by other participants. Details of proposed changes in out-quota tariff rates and the proportion designated to STEs can be found in Table 3.

3.1 Grain TRQ Allocation [8]

In China, the management of agricultural import TRQs is carried out by different government departments according to their administrative roles. For example, grain TRQs are managed by the National Development and Reform Commission (NDRC), which also manages cotton TRQs. TRQs of vegetable cooking oils, sugar and wool are managed by the Ministry of Commerce. Highlighted below are general management issues concerning the application, allocation and re-distribution of grain TRQs.

Table 3. STE Trading Proportions and In-quota and Out-quota Tariff Rates

Grain	Share Designated to STEs (%)			Tariff Rate（%）		
				Out-quota		In-quota
		Description	HS Code	At the time of accession (2001)	Final rate (2004)	
Wheat	90%	Durum wheat	10011000	74	65	1
		Seed	10019010	74	65	1
		Other	10019090	74	65	1
		Wheat or meslin flour	11010000	74	65	6
		Groats and meal	11031100	74	65	9
		Pellets	11032100	74	65	10
Corn	71% in 2001, 68% in 2002, 64% in 2003, 60% in 2004	Seed	10051000	32	20	1
		Other	10059000	74	65	1
		Flour	11022000	64	40	9
		Groats and meal	11031300	74	65	9
		Cereal grains otherwise worked	11042300	74	65	10
Paddy and Rice	50%	Seed	10061010	74	65	1
		Other	10061090	74	65	
		Husked (brown) rice	10062000	74	65	1
		Semi-milled or wholly milled rice, whether or not polished or glazed	10063000	74	65	1
		Broken rice	10064000	74	65	1
		Flour	11023000	64	40	9
		Groats and meal	11031400	28	10	9

Source: Based on WTO (2001), Agreement of Accession of the People's Republic of China.

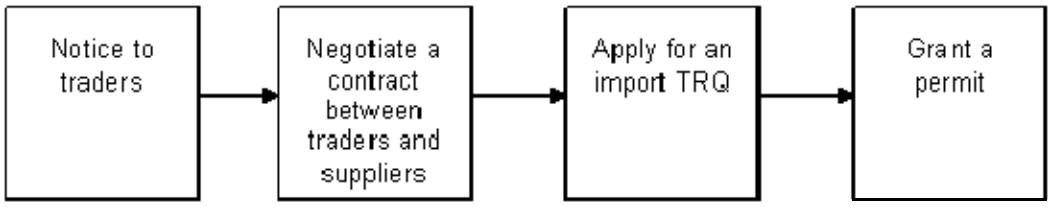
The NDRC predicts the amount of imports required in a calendar year and submits a request to the State Council. After the approval by the State Council, the NDRC is in a position to distribute the import quotas among traders including STEs. China's WTO agreement allows China's STEs to import grains under the TRQ arrangement at a pre-determined proportion (see Table 3). Currently the STE that is designated to handle TRQ imports of grain is COFCO Limited. It has the privilege to be allocated a certain portion of the total grain import TRQs from the NDRC. The remaining TRQs are distributed to other traders according to the following general principle and approach. (1) If the remaining amount of TRQs is greater than the amount requested, all traders eligible for applying for a TRQ are allocated the amount they applied for. (2) If the amount is smaller than the total amount requested, then those who have grain import experience are

allocated the TRQs first. The leftover is then distributed among those who have not previously imported grains.

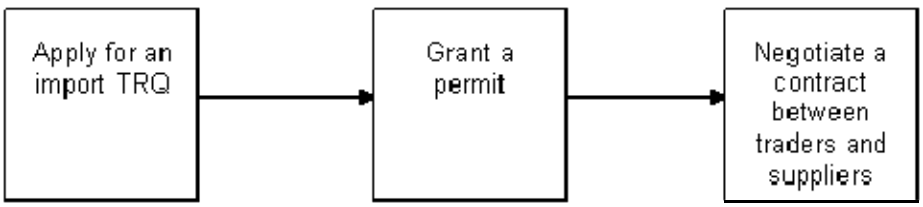
Non-STE traders need to apply to the agents of the NRDC scattered in various provinces between 15 and 30 October each year for an import quota for the next calendar year. The NRDC then determines the amount to be granted based on the approach described above (i.e., trader's past import performance, trader's grain processing capacities, with reference to various other commercial considerations). After the amount is determined, the NDRC, through its agents, issues an 'agricultural import TRQ permit' to a trader no later than 31 December of the current year for imports in the next calendar year. The TRQs must be utilised by the traders within a calendar year. If the imports have departed the origin port before 31 December but can only arrive at a port in China sometime in the next calendar year, the trader must apply for an extension. The extension, however, is generally not beyond the end of February of the next calendar year.

If a trader cannot utilise all the allocated TRQs, the unused TRQs must be returned to the NDRC before 15 September. The returned TRQs will be redistributed. Application for redistributed TRQs takes place between 1 and 15 September. Returned TRQs are redistributed to traders according to the order of their applications submitted. Before 1 October, the NDRC informs the traders of the results of their application for extra TRQs through redistribution.

Hence, the initial procedure used by China to distribute the grain TRQs after its WTO accession may be shown as below:



This procedure is troublesome for traders. If a trader managed to secure a contract with a foreign supplier but then the TRQ import permit is not granted or not granted in full for the amount specified in the contract, the traders cannot make the purchase, leaving both the trader and supplier in difficult situation. In 2003, modifications were made to make the procedure simpler and taking less time to obtain a permit. The simplified procedure is shown below and it has made it much easier for traders to conduct their businesses.



It is noted, however, the quota granted to private traders tends to be too small in many cases. This makes it less commercially worthwhile for private traders to make use of the

quota. Such small amounts of quotas are often returned for reallocation, which in turn often falls into the hands of STEs.

3.2 Grain TRQ Utilisation

China's grain TRQ utilisation has been low since its WTO accession although its utilisation of the TRQs for some other agricultural products has increased and has reached a relatively high level. For example, during 2002-2005, the TRQ usage of sugar, soybean oil and wool exceeded 60 per cent (Han 2005). According to official statistics, the actual imports of palm oil more than doubled the TRQ amount. The imports of cotton were also 1.6 times of the TRQ amount. On the other hand, the grain TRQ utilisation has been relatively low and the average utilisation was only about 12 per cent during 2002-07. At the product level, the average utilisation of wheat TRQ during the same time period was slightly higher, being 22 per cent, while that of rice and corn is 10 per cent and 0.3 per cent, respectively.[9] During the first six months in 2008, the TRQ usage remained to be very low. Table 4 provides details of the TRQ usage during 2002-2008.

Table 4. Grain Tariff-Rate Quotas and Actual Imports, 2002-08 ('000 t)

		Wheat	Corn	Rice	Total or Average
2002	TRQ	8468	5850	3990	18308
	Import	605	6	236	847
	Usage (%)	7.1	0.1	5.9	4.6
2003	TRQ	9052	6525	4655	20232
	Import	424	0	257	681
	Usage (%)	4.7	0.0	5.5	3.4
2004	TRQ	9636	7200	5320	22156
	Import	7258	2	766	8026
	Usage (%)	75.3	0.0	14.4	36.2
2005	TRQ	9636	7200	5320	22156
	Import	3539	4	522	4065
	Usage (%)	36.7	0.1	9.8	18.3
2006	TRQ	9636	7200	5320	22156
	Import	613	65	730	1408
	Usage (%)	6.4	0.9	13.7	6.4
2007	TRQ	9636	7200	5320	22156
	Import	101	35	487	623
	Usage (%)	1.1	0.5	9.2	2.8
2008 (1-6)	TRQ	9636	7200	5320	22156
	Import	3.3	1.9	209	214.2
	Usage (%)	0.0	0.0	3.9	1.0

Sources: Based on WTO (2001), Agreement of Accession of the People's Republic of China, and MOA (2008), Statistical Information.

Table 5 shows the sources of grains imported under the TRQ arrangement. Canada, Australia, France and the U.S. are the major sources of wheat imports. Corn chiefly comes from the U.S. and Laos. Thailand is the major source of rice imports. Apart from those designated STEs, those who imported grains are mainly some large grain processors or traders located in cities along China's southeast coast. In terms of the usage of imported grains, higher protein wheat imported from Canada and the U.S. is chiefly used for bread production while wheat with lower protein content from Australia is primarily used to produce biscuits and other processed foods. Rice and corn are also used for industrial purposes or food processing.

Table 5. Major Sources of Grain Imports (%), 2004-07

	2004	2005	2006	2007
Wheat	61.0%	85.5%	96.6%	88.8%
Canada	34.9	41.0	15.5	44.8
Australia	24.6	28.6	50.2	26.7
France	1.4	15.9		
USA			30.9	17.3
Corn	25.7%	67.0%	99.5%	99.4%
USA	25.7	17.8	90.5	10.9
Laos		47.1	7.5	45.9
Burma			1.4	42.6
India		1.1	0.1	
Rice	96.5%	99.9%	100.0%	99.8%
Thailand	96.1	91.9	94.5	93.5
Vietnam	0.4	8.0	4.9	5.4
Burma		0.1		
Laos			0.6	0.9

Source: Ministry of Commerce, Monthly Bulletin of Chinese Agricultural Import and Export Statistics.

4. Factors Affecting Grain TRQ Utilisation

According to Table 4, the utilisation of the grains TRQs has been relatively low since China's accession to the WTO. The rates of utilisation also differ significantly among the three major grains, namely, wheat, rice and corn. In principle, restrictions imposed by TRQs on imports depend on the out-quote tariff rates specified. If trading parties are willing to trade at the out-quota tariff rates, then imports are not restricted by TRQs. Since the out-quota tariff rates are generally very high, under normal circumstances, trading does not take place at the out-quota tariff rates. However, in the past seven years there was no need for China to import grains at the out-quota tariff rates, since a large portion of the grain TRQs had not been utilised. Then, what are the major factors that led to China's low utilisation of grain TRQs?

Increased support for domestic grain production reduces the need for imports. To a great extent, domestic grain demand and supply situations dictate a country's grains trade. Increased incentives to farmers for greater production improved China's domestic supply, which in turn has led to reduced needs for imports. Discussion in the earlier section clearly shows that China's domestic support to grain production has been on the increase since its WTO accession, particularly after 2003 when China experienced another major reduction in grain output and the subsequent price increases in the grain market. China's improved supplies from domestic production have been the major reason responsible for the low utilisation of the grain TRQs.

Higher quality grains produced domestically substitute imports. In the past, small-scale farm production coupled with inadequate grain marketing facilities made it very difficult for China to produce grains of the desired quality at the desired quantity for specific usages (Zhou and Tian 2006). First, the quality of grains varies from farm to farm. Second, grains of better quality are often not handled separately, due to either lack of facilities or the small quantity. As a result, China often imports grains, especially wheat, of high quality for some special usages. Recently, more attention has been given to the production of higher quality grains through some innovative arrangements between food-processing firms and farms (such as 'ding dan nong ye' – a kind of contract farming, under such arrangements firms usually provide farmers with technical assistance to produce wheat with desired attributes) (Ministry of Agriculture (MOA) 2003).

Grain export incentives encouraged export. As pointed out earlier, after WTO accession, grain exports attract a zero value-added tax. Sales tax on grains exported would be fully refunded. Further, no railway construction levies would be imposed on grain transported which can reduce rail transportation cost by about 40 per cent. The combination of such incentives made it still possible for China to export grains (chiefly, corn) at the world prices that were lower than China's domestic prices. China exported a large amount of corn during 2002-07 (about 47 mt) and its corn TRQ usage is almost zero (see Table 4).

Transaction costs make imports less attractive. Despite the fact that the world grain prices were lower than China's during most of the times between 2002 and 2007, imported grains have to bear extra transaction costs, including, for example, transportation, in-quota tariff, VAT. Higher costs translate into higher prices, leading to reduced demand for imported grains. It is noted that China collects a 13 per cent VAT on import. Hence, even if the nominal tariff rates are reduced to zero, this import VAT can still effectively dampen down the price competitiveness of imported grains.

TRQ allocation and implementation methods limit grain imports. Grain TRQs are first divided between STEs and non-STE traders. A large portion of the TRQs is assigned to STEs. If STEs cannot use up all the assigned TRQs, with the approval by the NDRC, the unused TRQs will be allocated to non-STE traders. However, private traders may not have sufficient time to organise such imports before the end of the allowed time. Also, procedures used by the Chinese government to allocate the TRQs to private traders can impede grain imports. As pointed out earlier in this section, the allocation and re-distribution of TRQs to non-STE traders, though largely reasonable, could sometimes lead

to difficulties in grain imports. Recently, the government has made efforts to improving the TRQ administration.

According to the above, China's very low-level usage of the grain TRQs is chiefly due to its domestic supply-demand situations. Its grain production and subsidy policies encouraged domestic production and also industrial adjustments to produce grains to meet market demand. Export incentives encouraged grain exports while the implementation of grain TRQs was not always conducive to grain imports. Will China be able to maintain such a low level of grain imports into the near future? This largely depends upon its domestic grain supply-demand situations and the outcomes of its bilateral and multilateral trade negotiations.

5. China's Grain Trade and Policy Prospects

China's fast economic growth in the past three decades has led to the rapid expansion of non-agricultural sectors, resulting in a continuous decline in the proportion of agricultural GDP out of total GDP. In 1978, when China's economic reform started, agricultural GDP accounted for 28.2 per cent of total GDP. This proportion, however, had dropped to 15.2 per cent by 2001 and has further drooped to 11.3 per cent by 2007 (NBS 2008, p. 21). Many agricultural activities are likely to further lose their comparative advantage as the economic returns of non-agricultural activities continue to improve. Declining comparative advantages in agriculture lead to resources deviated to non-agricultural uses, such as water and land. Without the advent of significant technological breakthrough (such as effective yield-augmenting measures), it will be difficult for China's agricultural sector to further increase its output. On the other hand, with improved purchasing power, consumers' demand for agricultural products, especially higher quality products, has been increasing and will continue to do so into the future.

As far as grain is concerned, grain production is land intensive. The production of some grain crops is rapidly losing their comparative advantages (e.g., rice production in southeast coastal regions). As a result, farmers shift their resources to other economic activities (Zhou and Tian 2006). For example, total area sown to grain crops declined from 106.1 million ha. in 2001 to 99.4 million ha. in 2003; the area increased to 105.6 million ha. by 2007 due to strong government incentives to grow grain (NBS 2008, p. 119). However, China's demand for grains is still increasing – although direct consumption has declined, indirect consumption of grains has been increasing due to increased demand for animal products and for processed food. According to Zhou and Tian (2003), China's demand for feedgrains has been increasing and will become the major component of China's total grain demand. Any future increase in total grain demand in China will be mainly caused by an increasing demand for feedgrains. On the other hand, many believe that China will not be able to meet the increased demand for grains in general and feedgrains in particular with its domestic supply (Garnaut and Ma 1992; RGCFDS 1993; Crook and Colby 1996; Findlay 1998; Tian and Chudleigh 1999; Chen 2004; and Zhou and Tian 2005). There are two broad approaches China can use to increase its total grain supply: (1) to further increase domestic supply, and (2) to increase grain imports.

The potential of the first option is limited as has been pointed out due to the declining comparative advantage of grain production. Likely future changes in resource allocation and pricing (e.g., deviation of land, labour force, and water away from agriculture, and possible charges on water use) will further erode China's comparative advantage in grain production. Should China insist to increase grain supply from domestic production to meet the increasing demand, the cost, both economically and environmentally, can be large. Hence, increasing grain imports is likely to be the chief method for China to increase its total grain supply to match the rising demand.

Although China's future grain imports are expected to increase (Chen 2004; Zhou and Tian 2005), policies regarding market access are unlikely to have significant changes in the immediate future. As a result of the failure of the Doha Round, it is to China's advantage to maintain the current market access policies unchanged unless China needs to significantly increase its grain imports. Any major changes in market access policies will also depend upon the progress and outcomes of multilateral and bilateral trade negotiations. In regard to multilateral negotiations, the recent WTO meetings such as the Delhi meeting have not significantly revived the negotiation process. When negotiations do get restarted, WTO members with major grain exports may press China to further open its grain market. They are likely to pay more attention to the allocation and management of the grain TRQs if the grain TRQs are continued.

China has become increasingly engaged in bilateral trade negotiations in recent years, for example, with ASEAN, Chile, Australia, New Zealand, and Pakistan. The negotiations with ASEAN and Chile have been concluded. China-ASEAN FTA was put into practice on 20 July 2005 while the implementation of China-Chile FTA was started on 1 October 2006. Cereal exports to China from these countries will enjoy reduced tariffs. It seems that it is a very wise strategic choice, through bilateral FTAs, for China to maintain close economic and trade relationships with some key grain-exporting countries. This will enable China to secure a relatively diverse source of grain suppliers and will help China to establish a stable source of grain supply. This can be a very important strategy that will help China to achieve its long-term national grain security.

However, some argued that increased trade liberalisation does not necessarily ensure China's rural development and increase farmers' income (Shui 2006). Currently, raising farmers' income, protecting rural employment, and reducing rural poverty are major challenges faced by the Chinese government. Grain production remains a major source of income for many small Chinese farms and China may have to rely on this industry to provide the livelihood for many Chinese farmers for some years to come. Thus, it may be anticipated that China can be very sensitive in regard to the level of access for imported grains to the Chinese market. Nonetheless, in future negotiations, trading partners are most likely to ask China to further open its grain market. Further, there are the needs for China to import more grains. Consequently, the Chinese government may at times adjust its grain trade policies, either voluntarily or passively. However, any major such adjustments would be still based chiefly on changes in China's domestic grain demand and supply situations. In the near future, China is unlikely to be in need for large amounts of grain imports. Indeed, it is anticipated that China's grain exports in 2009 will increase. The following changes will lead to increased exports. (1) China had a good grain harvest

in 2008. (2) The government has announced that the 2009 minimum support price for wheat will be increased by 11-13 per cent. The 2009 minimum support price for rice will also be increased to a large extent (NDRC 2008). Higher MSPs will further boost output level in 2009. (3) Effective from 1 December 2008 till 31 December 2009, grain export tariffs will be either completely lifted (e.g., corn) or significantly reduced (State Council 2008).

6. Conclusions and Implications

Since China's WTO accession, there have been some notable adjustments in China's grain trade policies. Domestic subsidy has evolved from providing chiefly price support to both price and income support. Such support has increased rapidly in the past seven years in order to promote domestic grain production. China also increased its support for grain exports with increased emphasis given to encourage the export of processed grain products. In terms of market access, China has done well to honour its WTO accession commitments and TRQ is the only means used by China to influence the access of grain imports to the Chinese market.

A relatively high proportion of the grain TRQs is traded by STEs and the management of the non-STE portion of the TRQs is still not very transparent, though the government has tried to make improvements. Hence, the use of grain TRQs has to some extent limited the imports of grains to China. However, TRQ is only one of the several major factors that have contributed to the low usage of the grain TRQs. Other major factors include: increased domestic grain production support and thus increased output, and improved availability of higher quality grains produced domestically.

Although it was low in the past years, the TRQ usage is likely to increase in the future. It is generally held that China will need to increase its grain imports. In future trade negotiations China may agree to further open up its grain market but may attach conditions such as asking for further opening up of labour intensive product markets by its trading partners. China may also relate its grain and other agricultural product markets opening up to the international movement of production factors such as capital, technology, and labour.

However, in the near future, it is unlikely that the Chinese government will bring significant changes to the current grain trade policies, unless there are drastic progresses with the WTO multilateral trade negotiations or large unexpected changes in domestic grain supply. Government support to encourage grain production is expected to continue and is likely to further increase. It is not anticipated that export support will increase significantly unless there is a temporary glut in domestic production and China needs to export badly. Whether foreign grains will have improved access to the Chinese market will depend on China's domestic supply and demand; however, trading partners having a bilateral FTA with China are expected to have improved access to the Chinese grain market. TRQs will continue to be used by China as its only major means to control grain imports to China. Any changes in the amount of TRQs, the management of TRQs, and the out-quota tariff rates, will be primarily influenced by China's domestic grain supply and

also to a great extent by the progress and outcomes of multilateral and bilateral trade negotiations.

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[1]. For example, Australian Wheat Board (AWB) and Grains Research and Development Corporation (GRDC) commissioned researchers at ANU to look into the dynamics of China's wheat market and trade soon after its WTO accession and the report emphasised the importance to understand China's grain TRQ issues (AWB and GRDC 2005)

[2]. Grain in China includes cereals (rice, wheat, corn, sorghum, millet and other miscellaneous grains), tuber crops (sweet potatoes and potatoes only, not including taro and cassava), as well as pulses (including mainly soybeans, red bean, and mung bean). The output of tuber crops (sweet potatoes and potatoes) was converted on a 4:1 ratio, i.e., four kilograms of fresh tubers were equivalent to one kilogram of grain, up to 1963. Since 1964, the ratio has been 5:1. The output of beans refers to dry beans without pods. The term "grain" generally includes all these "grains" unless otherwise indicated.

[3]. Soybean has been one of the major grains in China's international grain trade. As early as in 1996, China started to apply a tariff-rate quota to soybean imports, with an in-quote tariff being 3 per cent, a preferential tariff 40 per cent and an ordinary tariff 180 per cent. During the WTO entry negotiations, China agreed to remove soybean import TRQ and also to reduce soybean import tariffs significantly to be 3 per cent only. For soybean powder, the tariff is 5 per cent. China also agreed that by 2006 soybean oil import TRQ would be removed and the import would be only subject to a 9 per cent tariff.

[4]. In 2003, State Development and Planning Commission (SDPC) was renamed as National Development and Reform Commission (NDRC).

[5]. In September 2007, it was stipulated by an NDRC notice that exemption of railway construction levies will be continued for grain transportation except for grains transported by railway from northeast China to other parts of China, in which case, an ¥18 per tonne would be collected from 10 October 2007 (NDRC 2007).

[6]. Currently developed countries are allowed a minimal amount of Amber Box support ("de minimis"). For support that is not given to specific products, this is defined as 5 per cent of the value of total agricultural production. For support given to a specific product, the limit is 5 per cent of production of that product. Developing countries are allowed up to 10 per cent of these. The framework says de minimis will be reduced by an amount to be negotiated, with special treatment for developing countries, which will be exempt if they "allocate almost all de minimis support for subsistence and resource-poor farmers" WTO (2007).

[7]. In March 2004, China's Premier, Wen Jiabao, pointed out that agricultural tax rate would be gradually reduced and agricultural tax should be completely phased out within five years (Wen 2004). By early 2006, agricultural tax disappeared nationwide. This enabled farmers to retain extra income, which has an important impact on production and livelihood of farmers in poorer regions.

[8]. Much of the discussion in this section is based on a joint notice by the Ministry of Commerce and the National Development and Reform Commission (2003), 'Temporary management procedures of agricultural import TRQs', Notice No. 34, 2003, and descriptions in WTO (2001), Agreement of Accession of the People's Republic of China.

[9]. As a result of price changes in domestic grain market in 2003 and 2004, the utilisation rate of wheat TRQ increased in 2004, reaching 75.3 per cent. Rice TRQ usage was also higher, being 14.4 per cent in 2004.