



Implications of China's WTO Concessions for the U.S. Wheat Industry

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China has long been a prominent trading partner with the United States. In the 1990s, the U.S. and China were involved in various trade negotiations, coming to a temporary agreement in 1999. This agreement was solidified and expanded in December of 2001, when the World Trade Organization (WTO) convened to finalize freeing world trade with China. While China still has more changes to implement towards freer trade, the WTO accession has increased China's participation in the world economy. As products from China have flooded international markets, consumers in the U.S. and other countries across the globe have benefited from lower priced goods in footwear, garments, electronics, and household appliances.

Besides providing lower priced imports, China has become a major buyer of U.S. products, especially agricultural commodities. Since 2002, the value of China's agricultural imports has more than doubled; in 2004, China became the fourth-largest overseas market for U.S. agricultural products, accounting for nine percent of U.S. agricultural exports. Among other commodities, U.S. wheat exports to China in the aftermath of the WTO 2001 accession have increased by 13 percent (Fred Gale, ERS, USDA). Given the importance of wheat marketing to the economy of Oklahoma, the objective of this fact sheet is to assess the effects of freer trade on China's wheat imports and the implications for Oklahoma wheat producers.

Factors Shaping Wheat Demand in China

The exchange of wheat between the U.S. and China is significant for Oklahoma farmers. The production of wheat stands as Oklahoma's top export crop in 2004. Oklahoma farmers exported more than \$420,000,000 worth of wheat, placing it as the third highest wheat producer in the nation. In order to have a better understanding of expected future changes in wheat imports by one of the United States' potentially largest markets, it is important to recognize the underlying factors shaping the demand for wheat in China.

Four factors have and will continue to increase demand in China for U.S. wheat exports as a result of the 2001 accession. These include the reduction of tariffs and quotas, a shift towards the country's comparative advantage, environmental issues, and changing consumption trends.

Tariffs and Quotas

China's accession into WTO has meant a reduction in its tariffs, quotas, value-added-taxes, and state trading, among other government regulations. In addition, since the WTO accession, the Chinese government has been required to reduce the power of state trading monopolies, eliminate export subsidies, give equal treatment to imported and domestic products, publish and seek comments on all trade regulations and base phytosanitary rules on science (ERS, USDA). For example, the Tariff Rate Quota System (TRQ)¹, while fairly dysfunctional and unused in 2002 because of existing trade barriers, has recently been made accessible to foreign wheat exporters as these trade barriers have been lifted. Eventually, in congruence with WTO requirements, the TRQ will be completely lifted and free trade in wheat will be practiced.

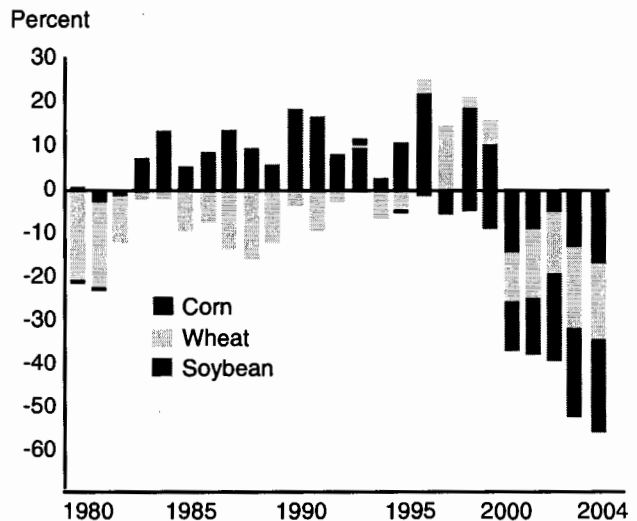


Figure 1. China's demand for corn, wheat, and soybeans outpaced supply since 2000.

Note: Chart shows difference between production and estimated domestic use for each year.

Source: U.S. Department of Agriculture, World Agricultural Outlook Board, "World Agricultural Supply and Demand Estimates."

¹ A TRQ system allows for a specific number of goods to be imported at one tariff rate (the within-quota rate), whereas any imports above this level face a higher tariff rate (the over-quota rate).

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The process to reduce government control over domestic and international trade is not complete—negotiations have specified that these changes may be gradual, over a number of years. However, China has already modified its grain import and export activity in correlation with the relaxation of government restriction in free trade.

The Figure 1 depicts a switch from exports to imports. Chinese wheat imports have increased 10 percent since 2002 (China Briefing Room, ERS, USDA). Previously the Cereal, Oil & Foodstuffs Importing and Exporting Corporation (COFCO), a Chinese monopolistic state grain trader, determined and enforced domestic wheat prices. Because of free trade, Chinese buyers have had access to purchase foreign wheat at a competitive world price; undercutting COFCO's power in price setting.

Shift Toward Comparative Advantage

Relaxed governmental regulations will also have an effect on Chinese agricultural structure. Historically controlled by the government, the Chinese economy has been a servant to self-sufficiency requirements in domestic production. These requirements have distorted the economy away from its comparative advantage, or the production of commodities that most profitably use the country's resources. China has a labor intensive, land scarce resource base, meaning that its comparative advantage is to produce commodities that use more labor and less land. Thus, government stipulated self-sufficiency requirements have pushed the economy in China away from producing its most profitable commodities.

Future agricultural economic direction in China—in light of WTO requirements for the government to reduce its control over the economy—thus seems to be heading toward production of labor-intensive crops, such as vegetables and fruits, which farmers can export at a profit. Agricultural commodities widely produced in the past will be traded for production of more profitable commodities. Wheat, in particular, has historically been the least profitable crop in China, and is expected to steadily decline in production. During the past 20 years, China has been the largest wheat producing country in the world. As Chinese agricultural producers enjoy more freedom to shift away from producing wheat, a hole left in production will need to be filled by imports. There is some speculation as to the volatility of these recent economic trends in China; however, the WTO negotiation agreements will ensure limitation of government control over domestic production and freedom of the economy.

Environmental Factors

Environmental factors have also been the cause of increased demand in China for imported wheat. China, already a land-scarce country, is experiencing an accelerated exhaustion of available arable land due to various environmental issues. Problems, such as water scarcity resulting from the depletion of water resources in major production areas, desertification, overgrazing, and water pollution from chemical runoff currently plague the country's rural agricultural production areas. In addition, China has initiated preservation measures to protect environmentally fragile land by converting former crop land to

Table 1. Countries at a Glance (2000).

<i>Item</i>	<i>Unit</i>	<i>Argentina</i>	<i>Brazil</i>	<i>China</i>	<i>Russia</i>	<i>Ukraine</i>	<i>United States</i>
Population	Million	37	170	1,282	145	50	283
Agricultural workers*	Million	1.5	13.2	510.8	8.2	3.6	3.0
Total area	Million acres	687	2,111	2,370	4,218	149	2,378
Cropland**	Million acres	62	130	306	309	80	437
Cropland per agricultural worker	Acres	41.3	9.8	0.6	37.7	22.2	145.7
Value of agricultural production***	\$ Billion	13	64	173	26	5	194
Agricultural exports****	\$ Billion	10.8	12.8	13.1	1.1	1.7	56.5
Agricultural imports****	\$ Billion	1.3	4.3	15.4	7.2	1.0	44.9

* Total economically active population in agriculture (Food and Agriculture Organization of the United Nations).

** Cropland including nonpermanent pasture and fallow. Does not indicate amount of land potentially cultivable (Food and Agriculture Organization of the United Nations).

*** For countries other than the U.S., agricultural value-added, 1999 (World Development Indicators; calculated by ERS).

**** Crops and livestock, primary and processed, calendar year (Food and Agriculture Organization of the United Nations).

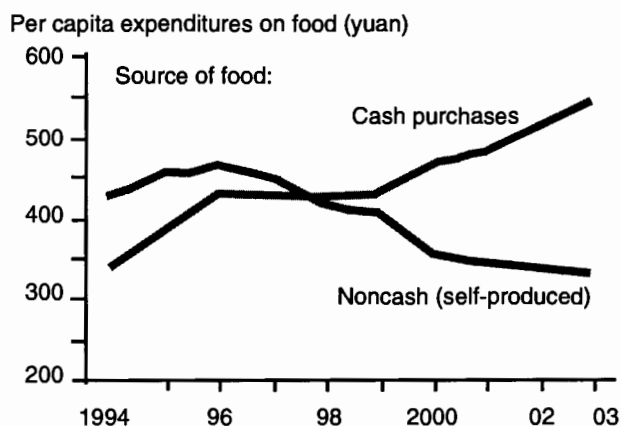


Figure 2. Rural Chinese Households Now Purchase More Food With Cash.

Note: Expenditures in constant 2000 yuan, deflated with China consumer price index for food.

Source: ERS calculations based on data from China National Bureau of Statistics.

forest or grass cover. These factors, and the fact that China already maximizes its land output by the heavy use of fertilizer and pesticides, confirm that China has not only reached its maximum domestic agricultural production, but will now see a decline in production potential. According to the chart below, China's available cropland per agricultural worker is 0.6 acres—well below those of other producing countries. While the value of its agricultural production shows competitive in 2000, there is no room for future growth.

These factors and the shift of agricultural production from traditional crops dictated by government policies (such as wheat) into more profitable products, such as vegetables, fruits, and specialty crops, have decreased the land available to be allocated for wheat production in China. U.S. wheat producers have and are expected to continue to fill this gap with increased exports to China and other world markets.

Changing Consumer Tastes

Changing consumer trends, as a result of the WTO accession, including increasing consumer wealth and an emphasis

on wheat quality specification, also lead to increased demand in China for U.S. wheat exports. As China has opened its doors to free trade, domestic producers profit from selling in new markets and producing according to their comparative advantage. Consumers are becoming richer from access to lower priced imports and a general boost in the economy. This increased wealth in China has allowed consumers greater buying power and improvement in diets. Rural consumers, for example, during the past 10 years, have increased cash expenditures on food by more than 70 percent (ERS, USDA).

The increased expenditure is allocated to more wheat-based semi- or highly-processed and other convenience foods and fewer staples and preparation-intensive products, and has been caused by a general shift in the average Chinese consumer diet from a base in wheat and rice to more processed, Western style foods. As a result, wheat buyers in China are seeking wheat with qualities conducive to processing to keep up with domestic demand. Chinese processors formerly sought wheat quality of generally middle gluten content, conducive for baking dumplings, noodles, and steamed bread. Now, as consumer demand for Western processed food has increased, the type of wheat quality demanded has also changed. Buyers in China are now seeking wheat quality with high gluten content, good for making breads, or low gluten content, favorable to producing cookies, crackers, and cakes. Hard Red Winter Wheat, the most commonly produced wheat in Oklahoma, is classified as having high gluten content. Demand in China for wheat produced in the U.S., particularly in Oklahoma, will thus follow as domestic consumption of Western style foods—especially bread—increases.

Conclusion

Changes in the Chinese economy, since their commitment with the World Trade Organization in 2001 to free trade; have been a boon not only to worldwide consumers as product prices have lowered, but also to U.S. agricultural producers. In particular, Oklahoma farmers have and are expected to continue to profit from increased demand in China for U.S. wheat exports as a result of open foreign price competition, a shift in agricultural production toward specialty commodities, decreasing cropland available for wheat production, and rising demand for wheat with specific gluten qualities. Although some trade barriers still exist, the future looks promising for U.S. wheat exporters as China continues to implement WTO free trade requirements over the next few years.

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The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

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- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

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