Research Focus

China's agricultural trade after WTO accession

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With China's entry into the WTO in December 2001, China's economy has been growing rapidly, averaging more than 9.8 percent from 2002–05. As agreed with the WTO, China reduced its import tariffs substantially to an average tariff on all products of 9.9 percent in 2005 from 15.6 percent in 2000 and on agricultural products to 15.3 percent from 23.2 percent in 2000.

China's foreign trade has been expanding even more rapidly than its overall economic growth. The total value of China's foreign trade grew annually by 28.6 percent in 2002–05 compared with 9.4 percent during the 1990s. China's total foreign trade rose to US$1,263 billion in 2005, increasing 177 percent over 2001. Undoubtedly, China's economy has benefited from entry into the WTO, especially from its more open and liberalised international trade regime.

The impact of China's entry into the WTO on its agricultural sector has been a major concern of the Chinese government and has been a hot topic among policy makers and academics inside and outside China. In general, experts argued that, based on China's resource endowments and comparative advantage, after entry into the WTO China's land-intensive farming sector would shrink, but labour-intensive horticulture, animal husbandry and processed agricultural product sectors would expand. So China would import more land-intensive agricultural products, like grains and vegetable oils, and would export more labour-intensive agricultural products, like vegetables and fruits, animal products and processed agricultural products.

The importance of agriculture in China's economy has been declining. Agriculture's share of China's total GDP declined from 15 percent in 2001 to 13.8 percent in 2004. The structure of the agricultural economy has also changed. Although the farming sector remains the most important sector, its share has been declining from 55.2 percent in 2001 to 50 percent in 2004. Animal husbandry and fishery sectors have been growing rapidly, increasing from 41.2 percent in 2001 to 46 percent in 2004.

These changes demonstrate that, with the rapid economic growth especially after China's entry into the WTO, the comparative advantage of China's agricultural sector has been declining in general, and the comparative advantage of China's farming sector has been declining in particular. This changing pattern of comparative advantage is consistent with China's resource endowments. China's per capita arable land is 0.11 hectare, only 43 percent of the world average. China's per capita pastoral land is 0.33 hectare, only one third of the world average. China has abundant labour supply: a population of 1.3 billion, nearly 70 percent living in rural areas; half of the entire labour force is in the agricultural sector.

Some aggregate trends are evident in China's agricultural trade over this period. After entry into the WTO, agricultural imports increased more rapidly than agricultural exports. From 2002 to 2005, the annual growth rate of agricultural imports was 31.5 percent, while that of agricultural exports was 11.6 percent. In 2005, the value of agricultural imports surged to US$26.64 billion, increasing 136 percent over 2001, while the value of agricultural exports was US$23.81 billion, increasing 55 percent over 2001. As a result, in 2004 and 2005, agricultural imports exceeded agricultural exports and China has had two consecutive years of agricultural trade deficit since the 1990s. Higher growth of agricultural imports is expected to continue.

China's agricultural exports are dominated by processed agricultural products, animal products, and horticultural products. Thus China's agricultural exports are dominated by labour-intensive agricultural products, while...
China's agricultural imports are dominated by land-intensive agricultural products. These patterns of agricultural trade have been strengthened after China's entry into the WTO.

Entry into the WTO has helped China move closer to a comparative advantage in agricultural trade with the rest of the world. China's overall comparative advantage in agriculture declined especially quickly after entry into the WTO. China has a clear comparative advantage in labour-intensive agricultural products. However, after from processed agricultural products, where comparative advantage increased marginally, the comparative advantage of horticultural products and animal products declined rapidly after entry into the WTO. Since China has no comparative advantage in land-intensive agricultural products, their comparative advantage declined quickly and dramatically under a more liberal trade regime.

What are the reasons for the changes of China's revealed comparative advantage in agriculture? Undoubtedly, changes in China's revealed comparative advantage in agriculture after entry into the WTO are mainly the result of the fast economic growth and the dramatic structural changes that happened in China. China's rapid economic growth has led to changes in the structure of China's economy. Growth in the manufacturing and services sectors has been much faster than the agricultural sector. Agriculture's share of total GDP declined from 15 percent in 2001 to 13.8 percent in 2004.

China's remarkable industrial growth played a large part in driving up agricultural imports. Over 30 percent of the growth in China's agricultural imports in 2004 came from raw materials used in production of non-food manufactured products: cotton, wool, animal hides, as well as other agricultural-derived products used in industrial production. In particular, growing textile production is increasing textile production is growing with the rest of the world. China's overall comparative advantage in agriculture declined especially quickly after entry into the WTO. Since China has no comparative advantage in land-intensive agricultural products, their comparative advantage declined quickly and dramatically under a more liberal trade regime.

The continued increase in per capita income in China has led to not only a rise in food consumption, but also a change in the structure of food consumption. Since the late 1990s, China has dramatically increased imports of vegetable oilseeds (mainly soybeans) and vegetable oils (mainly soybean oil and palm oil). Driven by consumer and food industry demands, since the early 2000s, China has also significantly increased its imports of meats, fish, milk, cheese, wines, and fruits.

Significant barriers in international trade in agricultural products still exist, and developed countries have increasingly resorted to sanitary and phytosanitary (SPS) measures for animal and plant health and technical barriers to trade (TBT) to block agricultural imports, especially from developing countries. According to Chinese government sources, SPS and TBT have resulted in huge direct losses for China's agricultural exports, with indirect losses even greater. In 2001, about US$7 billion worth of Chinese exports were affected by SPS and TBT. According to China's Ministry of Commerce, about 90 percent of China's exporters of foodstuffs, domestic produce, and animal by-products were affected by foreign technical trade barriers and suffered losses totalling US$9 billion in 2002.

China's recent experiences with SPS barriers have been mainly with the EU, Japan, and the United States, which accounted for 41 percent, 30 percent and 24 percent respectively of China's trade losses attributed to SPS measures in 2002. Because failure to pass SPS inspections often leads to closer inspection of future exports, China's agricultural products have confronted much stricter inspection in these markets following SPS-related problems. For example, in early 2002, the EU began to ban imports of Chinese animal-derived food, seafood and aquatic products, resulting in a 70 percent slump in China's aquatic product exports in the second half of that year. From August 2002 to July 2003, the U.S. Food and Drug Administration refused 1,285 shipments of Chinese foodstuffs for entry into the United States. Excessive pesticide residues, low food hygiene, unsafe additives, contamination, and misuse of veterinary drugs have been major issues. Although the WTO SPS Agreement requires members to ensure that SPS measures are based on sufficient scientific evidence, concerns remain that countries may abuse SPS measures by using them as trade barriers.

Conclusions

Entry into the WTO has boosted China's agricultural trade, especially its agricultural imports. The pattern of China's agricultural trade is consistent with its resource endowments. After entry into the WTO, this pattern of agricultural trade has been strengthened, indicating that China is moving closer to its comparative advantage in agricultural trade with the rest of the world.

China's has a comparative advantage in labour-intensive agricultural products, but has a comparative disadvantage in land-intensive agricultural products. However, after entry into the WTO the level of the comparative advantage in labour-intensive agricultural products has been declining especially quickly in animal and horticultural products. Fast economic growth, structural change, and an increase in per capita incomes have all played a significant role in driving the changes in comparative advantage in China's agriculture. However, TBT and SPS measures may also contribute to a rapid decline of China's comparative advantage in labour intensive animal and horticultural products.

Because of low production and labour costs, some agricultural products exported from China are very competitive in world markets. Consequently, importing countries may look to restrict imports from China by setting relatively high SPS standards or may impose strict inspections in order to protect domestic markets. China itself should first increase and strengthen SPS levels to meet the international standards in order to increase its exports of animal and horticultural products to international markets, especially to developed countries' markets. As China faces more SPS disputes, the government needs to initiate bilateral negotiations to counter unfair trade restrictions and discrimination and could use the WTO to coordinate and resolve trade disputes. As a WTO member, China can now participate in the negotiation and establishment of international regulations and standards to obtain a more equal position for its agricultural exports.

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