China's growing role in world timber trade

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With its thriving economy, huge domestic market and cheap labour, China has emerged in recent years as a giant in wood products trade – a change that could have important ripple effects around the globe.

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China has been enjoying dynamic economic growth since the adoption of reforms and the opening of the country to the outside world in 1978. Annual variations notwithstanding, China's gross domestic product (GDP) has had a very high growth rate for a quarter century; it was over 10 percent in the early 1990s and since the 1997 Asian financial crisis and global economic recession it has oscillated between about 7 and 9 percent, reaching 9.5 percent in 2004.

Entering the new century, the Chinese Government initiated the Great Western Development Programme, which led to massive infrastructure development in western China. In July 2001, Beijing won the bid to host the 2008 Olympics, which has directly and indirectly fuelled infrastructure development in Beijing and many other cities. In November 2002, the Chinese Government emphasized the improvement of living standards for the whole country. The rapid economic growth and rising incomes have driven an increase in timber consumption for infrastructure development, building construction and interiors and furniture manufacturing.

At present, China is the world's largest importer of industrial logs – but its timber plantation programme, initiated in 2000, is expected eventually to help China balance domestic timber supply and demand

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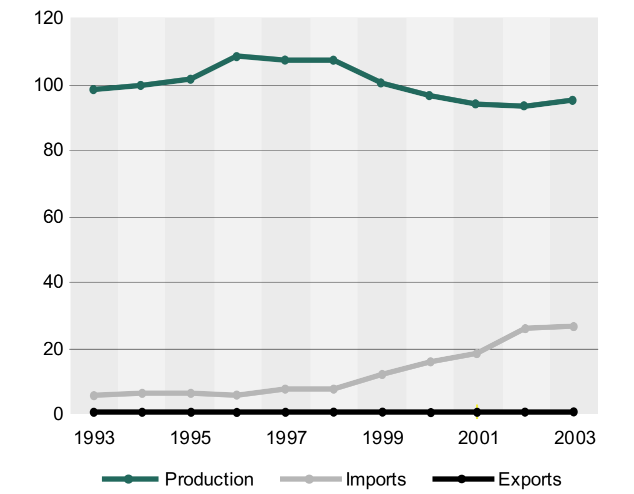
As a result of this growth, combined with a serious shortage of domestic timber supply, China has become an increasingly important player in world timber trade. With 17.5 percent forest cover in 2000 (FAO, 2001), China is poor in forest resources, and since 1998 its timber production has been limited by the Natural Forest Protection Programme, which banned logging from all natural forests in the southwest and reduced logging from those in the northeast. Timber imports have increased rapidly since 1999 to meet the growing demand.

China is now the largest importer of industrial logs and the second largest importer of forest products in the world, and the growth rate of these imports remains high. The main imported products are industrial logs, sawnwood and plywood. Imports of wood-based fibreboard and particleboard have also increased. China also imports significant amounts of pulp and paper products every year, which account for a higher roundwood equivalent than timber products.

To reduce the timber supply deficit and the timber imports, the Chinese Government initiated a timber plantation programme in 2000. It is expected that by 2015, the programme could produce 133 million cubic metres of logs annually, which could meet 40 percent of the domestic timber demand. This harvest, together with that from already existing plantations and from natural forests excluded from the logging ban, could enable China to balance its domestic timber supply and demand in the future.

As a result of this programme, as well as policies providing incentives for forestry development, many companies, primarily private ones, have been investing in large-scale plantations and wood processing industries in recent years. China has rapidly developed its wood processing industries, becoming a



Source: FAO, 2004.

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China's production and trade of industrial roundwood, 1993 to 2003 (million m^3)

major exporter of high-quality and price-competitive value-added wood products, primarily furniture and then plywood. In 2003, the total trade value of forest products imports was US$15.5 billion while that of exports was US$12.2 billion. Forest products are listed among the top ten imports and exports, respectively. It is estimated that the trade value of forest products could be balanced within five years as the export of value-added wood products is increasing at a faster rate than the import of primary wood products. In terms of trade value, China has already changed from a net importer into a net exporter of wood products.

IMPORT OF WOOD AS RAW MATERIAL

Logs represent the sharpest increase in timber imports in China. In 2003, China imported almost 27 million cubic metres of industrial roundwood (Figure 1). Although the log imports in 2003 were not much higher than in 2002, the volume of timber imported in 2003 was about 50 percent more than in 2001. The change is dramatic when compared with the log imports in 1993, which were less than 6 million cubic metres. Log exports, on the other hand, were so low as to be insignificant, just under 700 000 m^3 in 2003.

Softwoods are imported in greater quantities than hardwoods. The Russian Federation is the main source of imported logs, supplying about 60 percent of the total – about 95 percent softwood, mainly larch (mostly *Larix sibirica*) and Mongolian Scotch pine (mostly *Pinus sylvestris* var. *mongolica*). New Zealand follows, supplying mainly radiata pine (*Pinus radiata*). Imported hardwood mainly comes from Southeast Asia and West Africa.

The second main imported timber product is sawnwood, with imported volume of about 7 million cubic metres in 2003, while China's production was about 12 million cubic metres that year (Figure 2). The growth trend of sawnwood imports is similar to that of logs; the volume was about the same in 2003 as in 2002 but much higher than in 2001 and more than double that in 1993 (about 3 million cubic metres). The export of sawnwood, less than 700 000 m^3 in 2003, is also negligible. Hardwoods account for about 75 percent of sawnwood imported, mainly coming from Southeast Asian countries such as Indonesia, Malaysia and Thailand, while softwood imported as sawnwood mainly comes from the United States and the Russian Federation.

Three main reasons account for the only slight growth in imports of logs

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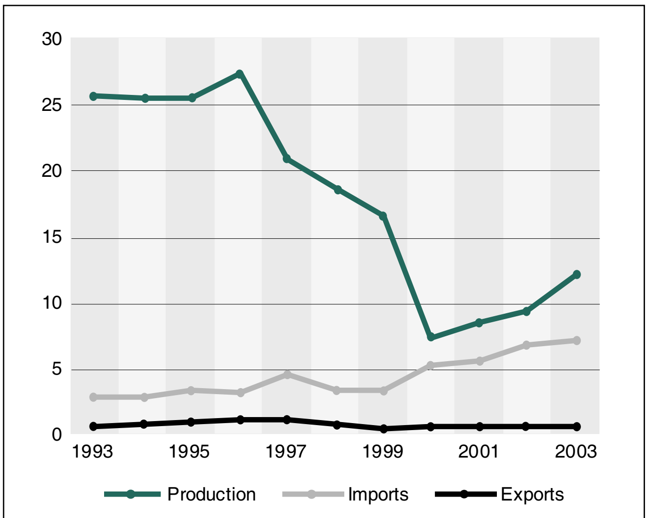
Imported Russian logs at Suifenhe, a major border crossing; the Russian Federation supplies about 60 percent of China's imported logs



Source: FAO, 2004.

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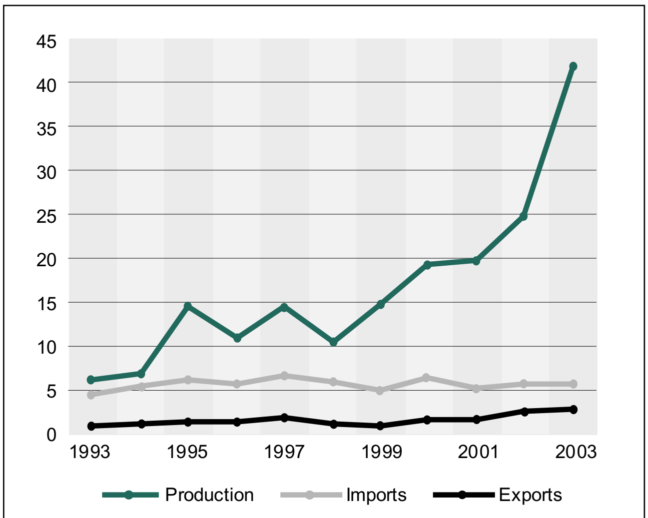
China's production and trade of sawnwood, 1993 to 2003 (million m³)



Source: FAO, 2004.

3
China's production and trade of wood panels, 1993 to 2003 (million m³)

and sawnwood from 2002 to 2003. First, domestic log and sawnwood production increased in 2003 over 2002 after six years of gradual decrease due to the Natural Forest Protection Programme. The production increase can be attributed to maturing industrial plantations, as logging from natural forests continued to decrease slightly. Second, there was nearly no increase in log imports from the Russian Federation, mainly because speculation by traders in 2002 resulted in a large overstock. The Russian Federation was the main source of growth in the preceding years. Third, the devaluation of Chinese currency, which is fixed to the United States dollar, against other currencies also had an influence.

GROWTH OF WOOD PROCESSING INDUSTRY

Rapid economic growth and strong timber demand has resulted in wide expansion of wood processing industries in many parts of the country. The government encourages both domestic and foreign companies, especially private ones, to invest in forest industry through preferential taxation and land-tenure policies. Despite a general overcapacity in processing facilities worldwide, many international companies, including some of the world's leading companies in the forestry sector, are still investing quite a lot in forest industries and plantations in China. The panel and pulp and paper industries are growing especially fast. In the past ten years, China has formed a number of large forest industry zones, such as plywood manufacturing bases in Hebei, Zhejiang and Shandong provinces and furniture manufacturing bases in Guangdong and some other coastal provinces.

China is becoming a major producer of panel products, with a total production of almost 42 million cubic metres in 2003, representing a sharp increase over the year before (Figure 3). This volume is almost as high as the total panel production in the United States in 2002. With the dynamic growth in this sector, China is expected to replace the United States as the world's leading producer of panel products within a few years.

Among the three main panel products of plywood, fibreboard and particleboard, plywood is a particularly promising product in China in terms of growth of both production and exports, at the same time that plywood production is seen as a sunset industry in some Asian countries. China's plywood production in 2003 was 22 million cubic metres, more than half of the total panel production the same year and almost doubling the figure of 12 million cubic metres the year before. China was a net importer of plywood during the 1980s and 1990s but is now a net exporter. Compared with the 3 million to 4 million cubic metres imported annually in the early 1990s, China's plywood imports have fallen to less than 2 million cubic metres in the past three years, while its plywood exports have increased to 2.4 million cubic metres in 2003. The price competitiveness of plywood production as a labour-intensive industry is responsible for the dynamic growth of China's plywood exports. Medium-density fibreboard (MDF) is also becoming a very attractive product for investors because of the high demand for this type of panel for use in furniture and flooring.

China has also become one of the world's key producers of paper and paper products, with production of more than 45 million tonnes in 2003 (Figure 4). The pulp and paper industries continue to expand, with heavy investment in this sector in recent years as well as a good market price. Asia Pulp and Paper Co. Ltd has invested in a dozen paper mills in the Yangtze River Delta near Shanghai, and a large pulp mill in Hainan Province with an annual capacity of 600 000 tonnes is in trial production. StoraEnso, UPM-Kymmene and International Paper are also investing in large pulp and paper projects. Thus in a few years the capacity will have increased significantly, alleviating to some extent China's dependence on pulp and paper imports.

At present, however, China still imports quite a lot of pulp and paper. The country still has very low paper consumption per capita, but the paper demand is growing rapidly with the country's dynamic economic growth. In 2003, China imported almost 7 million tonnes of pulp and 10 million tonnes of paper. These two figures could be calculated as a roundwood equivalent of over 66 million cubic metres, much higher than that of total timber products. Pulp and paper trade in 2003 exhibited a stable and high growth rate of about 15 to 20 percent compared with the year before. China also imports large amounts of waste paper to meet the strong demand for wood fibre for paper manufacturing, as the country still uses 80 percent non-wood fibre for pulp. In 2003, China imported 9.4 million tonnes of waste paper, more than 37 percent more than the year before.

The most promising wood product for Chinese exports is furniture. Although the import tariff on furniture has decreased sharply year by year with trade liberalization among Asia-Pacific Economic Cooperation (APEC) countries and with negotiations for China's entry into the World Trade Organization (WTO) during the 1990s, Chinese furniture exports still exhibit dynamic growth (Figure 5). In 1990, when China's import tariff on furniture was as high as 78 percent, the export value of furniture was only US$48.5 million. In 2003 China exported US$7.3 billion worth of furniture, over half of it wooden. It is expected that the value of China's furniture exports will reach up to US$9 billion in 2004, approaching the figure of the world's largest furniture exporter, Italy, currently about US$10 billion. Furniture will thus be the key force to balance China's forest products trade value in the near future. The main destination for exported furniture from China is the United States, followed by Japan and some European countries.

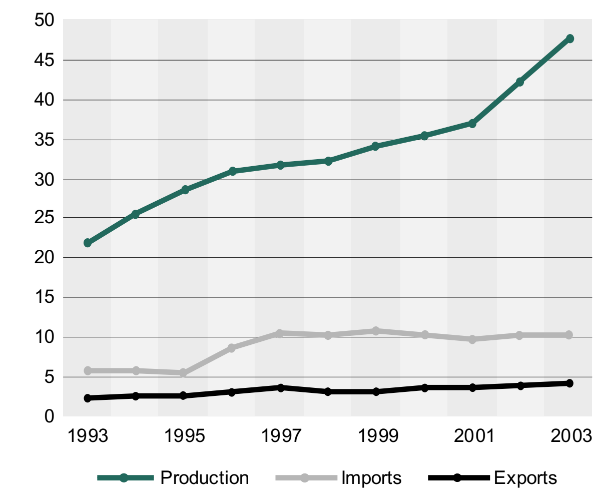
GROWING CHINESE MARKET

As the largest country in the world, with a population of 1.3 billion, China is a huge market, including for forest products. Consumption of industrial roundwood is divided almost evenly among urban building construction and interiors, furniture manufacturing, rural housing and agricultural infrastructure, pulp and paper making, and other uses. Sawnwood and plywood are mainly used for building construction and interiors and furniture manufacturing, while fibreboard (currently dominated by MDF) and particleboard are mainly used for furniture manufacturing and increasingly for flooring.

Consumption, like the industries themselves, is concentrated primarily in economically developed regions, mainly along the coast, even though the forest resources, especially the natural forests, are mainly located in the northeast and southwest.

CONCLUSION

China's total imports of all wood and wood-fibre products, calculated in roundwood equivalent, has reached more than 100 million cubic metres in the past two years (Figure 6). Although the country has still to balance its forest



Source: FAO, 2004; CTAPI, 2004.

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China's production and trade of paper and paperboard, 1993 to 2003 (million tonnes)

products trade value, there is no doubt that it has an increasing role in world forest products trade and has become a major consumer of the world's forest products. As labour costs are still quite low, China's furniture and plywood are very competitive. This has important implications for those countries that currently export forest products to China or to other countries to which China also exports.

In May 2003, the Chinese Government issued a Resolution to Accelerate Forestry Development, in which a medium- and long-term forestry development strategy, objectives and encouraging policy measures are clearly defined. The Chinese Government is confident that China can and shall be self-sufficient for its timber demand in 10 to 15 years, when its plantation base is expected to be able to supply sufficient timber in a sustainable way. China's forest industry is also sure to develop more rapidly with dynamic expansion of manufacturing capacities as a result of encouraging government policies, dynamic economic growth, rapid demand for all kinds of forest products, increased domestic timber supply as a result of plantation investment, strengthened domestic manufacturing capacities and improved product quality. This industry expansion would be totally market driven. It is expected to result in stabilized or even reduced imports of forest products, or at least a decreased annual growth rate of imports after 2015. On the other hand, it is likely to result in higher exports of value-added products, mainly labour-intensive furniture and plywood. Nevertheless, in the long term, even when China may be self-sufficient in forest products, it will still import selected products, such as large-diameter tropical hardwood for high-quality furniture, plywood and interiors, and wood pulp and paper for high-quality paper manufacturing.

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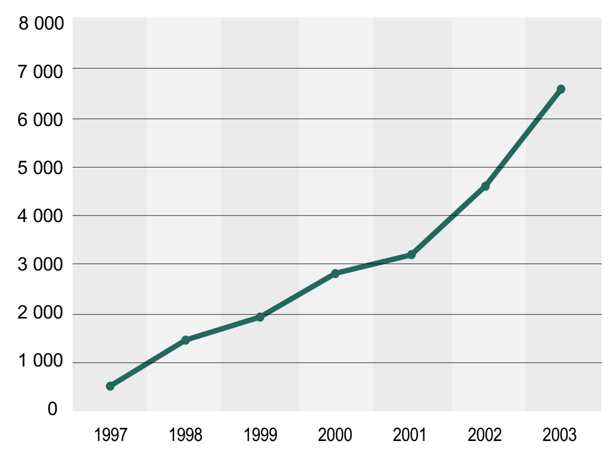
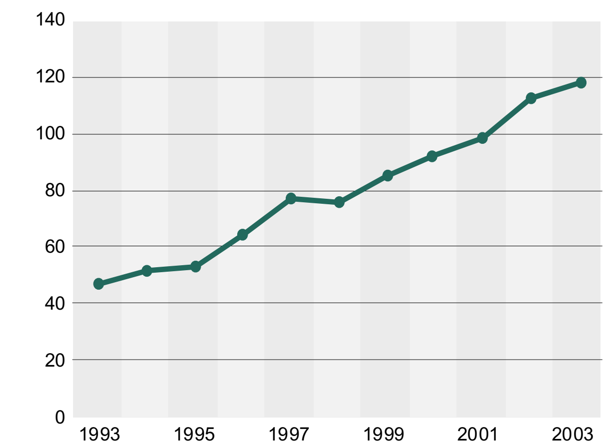
Growth in value of China's furniture exports (million US$)



Source: General Customs Administration of the People's Republic of China, 2004.



Source: FAO, 2004.
Note: Includes industrial roundwood, sawnwood, veneer, wood-based panels, pulp, paper and paperboard.

6
China's total imports of wood and wood-fibre products (million m^3 roundwood equivalent)

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