

# **OECD/CHINA INDUSTRIAL LINKAGES: TRENDS AND POLICY IMPLICATIONS**



**Directorate for  
Science, Technology  
and Industry**

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## SUMMARY

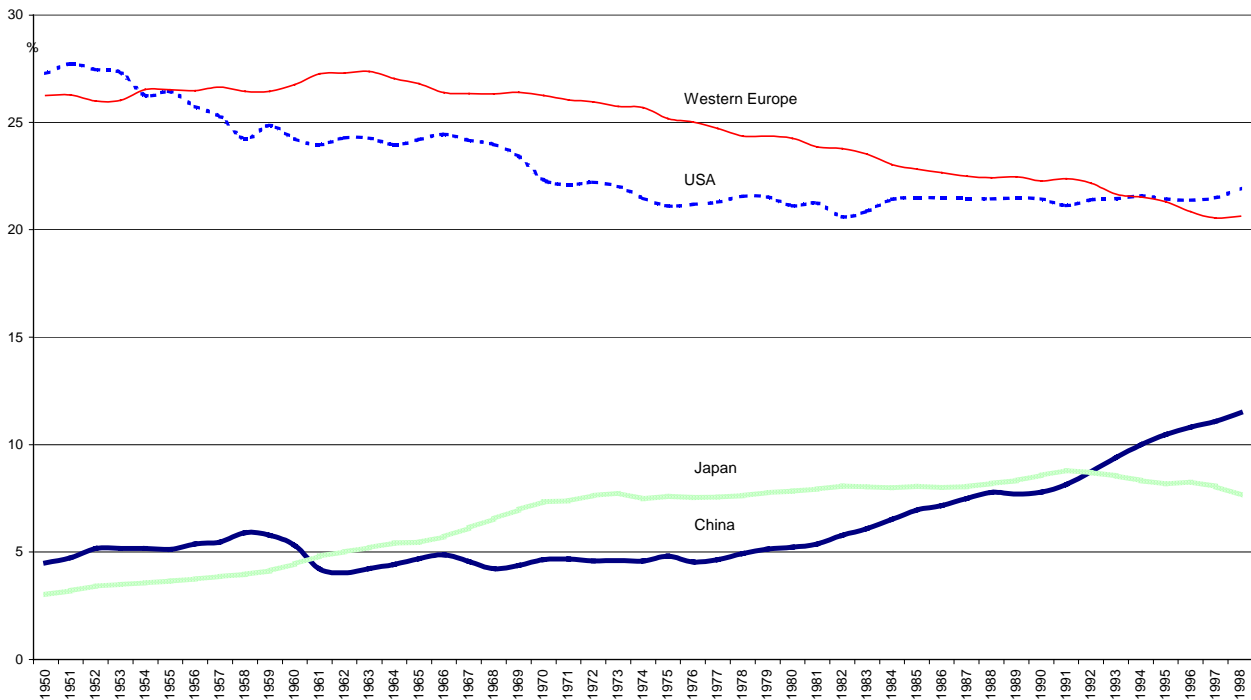
The role of China in the world economy has increased markedly in the last twenty years, concomitant with its industrial development. Industry is the driver of China's economic growth, increasing from 21% of GDP in 1952 to 51% at present. In the 1990s, China surpassed Japan to become the world's third largest economic power after the United States and the European Union. China's accession to the World Trade Organisation (WTO) on 11 December 2001 should further accelerate industrial development and growth. However, the liberalisation process in China could be slow and there remain obstacles to enhancing China's industrial performance, notably the need for industrial restructuring and enterprise reform.

China's entry to the WTO presents new opportunities for OECD industries and firms in terms of trade and foreign investment. Significant tariff reductions and removal of non-tariff barriers should lead to increases in OECD exports to China, particularly in sectors such as automobiles, machinery and equipment, and products based on information and communications technology (ICT). At the same time, China's exports of products such as textiles, steel and consumer electronics should rise, leading to changes in world market shares and stimulating restructuring in OECD industries. China's business environment should improve towards a more level playing field for foreign and domestic firms, improved protection of intellectual property rights, and more openings for OECD greenfield investment, strategic alliances and cross-border mergers and acquisitions (M&As) with Chinese firms. In particular, foreign investment in China's underdeveloped services sector, including telecommunications and financial services, should grow.

## INTRODUCTION

Since liberalisation began in 1978, China has experienced rapid growth and is emerging as a major player in the world economy. China was the largest economic power in the world for most of history until the mid-19<sup>th</sup> century when Western Europe surpassed China following the Industrial Revolution. The lack of modern industry caused China's relative importance in the world economy to decline until the mid-20<sup>th</sup> century. China started to regain global economic importance in the early 1970s concomitant with its rapid industrial development. Since 1993, China surpassed Japan to become the world's third largest economy after the United States and the European Union (**Figure 1**). China's importance in the world economy has grown in parallel with the rise of domestic industry. China became a member of the World Trade Organisation (WTO) on 11 December 2001. China's WTO accession will give rise to new growth potential -- fuelled by manufacturing and services sectors -- which will undoubtedly strengthen its economic position in the global economy in the future.

Figure 1. Trends in China's role in the world economy, 1950-1998



Notes: % of world GDP, corrected for purchasing power parity (PPP).  
 Source: Maddison (2001).

## OECD horizontal China project

The OECD has carried out a horizontal project on China, entitled "*Realising the Benefit of China's Trade and Investment Liberalisation: The Domestic Economic Policy Challenges*". The final report of the project, entitled "*China in the World Economy: The Domestic Economic Policy Challenges*" will be published in 2002. This project analysed the impact of China's accession to the WTO and identified the domestic reforms that are required for China to reap overall benefits and to maintain economic dynamism (**Box 1**). For industry, the priorities include continuing reform of state-owned enterprises (SOEs), financial reforms, enhancing openness to foreign investment, deepening industrial restructuring, increasing technological capabilities and carrying out further regulatory and competition-enhancing reforms to improve the business environment (*OECD 2001b, 2001c, 2001d, 2001e, and 2001f*). In this context, China's accession to WTO will play an important role in enhancing China's position in the global economy, as it will be accompanied by a wide range of liberalisation measures agreed in the context of accession negotiations. And by enhancing the openness of the Chinese economy and its integration into the world economy, it will have important implications for OECD countries.

This paper reviews some of the major channels through which OECD countries will be affected. It first provides an overview of Chinese industry and industrial development. It then analyses post-WTO changes that will affect OECD industries in the areas of trade, foreign direct investment, strategic alliances and cross-border merger and acquisitions in China. Analyses of implications for a number of OECD industrial sectors including textile, steel, automobile, household appliances, ICT, telecommunications and services sectors are provided in the Annex.

### Box 1. Main messages of OECD China Project

Important engines that have powered China's growth in the past are losing their dynamism. The underlying explanation is that China's economy has become badly fragmented and segmented, and this has led to increasing under-investment and inefficient utilisation of resources. Trade and investment liberalisation will help to stimulate growth in some areas while imposing difficult adjustments on others, but by itself, it is unlikely to solve the basic problems now impeding China's development. Realisation of the full benefits of WTO membership depends on progress in three priority areas of domestic reforms:

- Removing obstacles, especially with regard to financing, to business sector restructuring and better integration among various types of enterprises, between rural and urban areas, and among regions that have been developed separately under different sets of rules.
- Improving frameworks that are essential to efficient market functioning so that resources are efficiently allocated.
- Re-orienting the role of government in the economy, by strengthening the effectiveness of macroeconomic policies while refocusing the role of regulatory policy on establishing and enforcing rules for competitive market behaviour.

China must improve the business environment for enterprises through:

- *Improving the competition framework*: by *inter alia* creating a level-playing field, removing local protectionism, prohibiting conducts that harm competition and harmonising differentiated rules applied to state-owned and non-state enterprises.
- *Strengthening enterprise governance*: by improving independence and accountability of managers and boards of directors, removing restrictions on trading of SOE shares, and taking steps to improve financial market disciplines.
- *Reforming property rights and insolvency mechanisms*: by clarifying and strengthening SOE rights to property and rules governing the use and acquisition of state assets by non-state entities, and enacting a comprehensive bankruptcy law to ensure an effective exit mechanism.

Source: OECD (2001d).

## CHINA'S INDUSTRY AND INDUSTRIAL RESTRUCTURING

### The role of industry in China

Industry has been the driver of China's phenomenal economic growth of the past 50 years. Over the past half century, China has become increasingly industrialised. Industrial development has hastened since reform began in the late 1970s, growing at an annual rate of over 11% between 1978 and 2000 compared to an average GDP growth rate of 9.6% during this period (**Figure 2**). The importance of industrial output in the Chinese economy has increased over time, from 21% of GDP in 1952 to 51% at present (**Figure 3**).

During the past 50 years, China's industrial structure has evolved in three phases. *First*, there was a period of heavy industrial development during 1952-78. The government prioritised the development of heavy industries (e.g. steel, machinery and chemicals), whose share in total industrial value-added increased from 33% in 1952 to over 70% in 1978. *Second*, in 1979-94, China diversified its industrial structure by emphasising lighter manufacturing industries, such as food and textiles. Since 1995, Chinese industry has suffered from massive over-capacity resulting from extensive industrial investment. To rectify structural weaknesses, China entered its *third* period of industrial development, which was focused on expanding technology-intensive sectors and upgrading the technological level of industry more broadly.

At present, China's industrial sector displays the following structural characteristics:

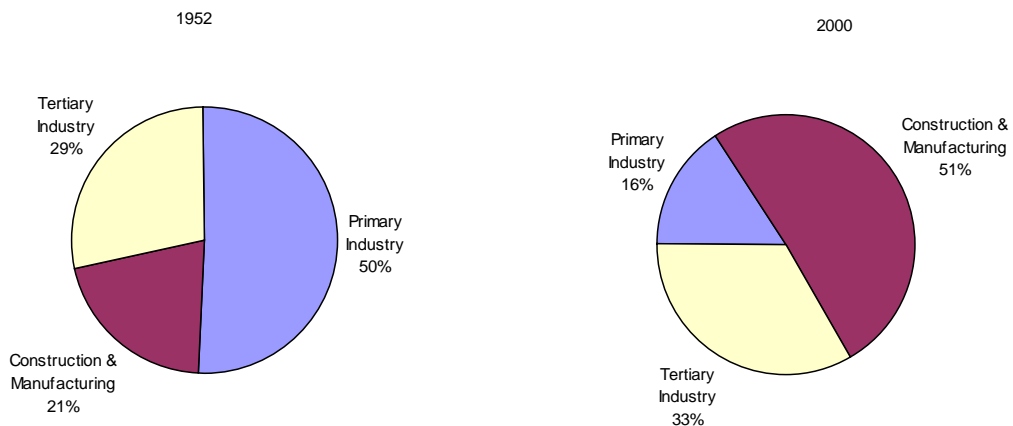
- ***China has a large, varied industrial sector*** with substantial production capabilities in energy, metals, chemicals, machinery and equipment, telecommunications and transport equipment, and consumer goods. Recent years have also seen rapid development of technology-intensive industries, particularly those based on information and communications technology (ICT).
- ***China has the world's largest production capacity in a number of industrial sectors***. These include coal, crude steel, cement, fertiliser, glass, and television sets. China's electricity generation capacity and synthetic fiber production rank second in the world.
- ***China has the production base to support industrial development***. China is primarily self-sufficient in the supply of basic industrial machinery and equipment for the mining, electricity, chemicals and manufacturing sectors as well as for rail transport and shipbuilding.
- ***China is a large industrial exporter***. Exports of industrial products have continued to grow, averaging 19% per year in US dollar terms between 1980 and 2000. Manufactured products now account for 89% of China's total exports, up from less than 50% in 1980. Main exports include machinery and transport equipment, accounting for 30% of total exports in 1999, electronics products (21%) and textiles (21%) (IIE, 2000).

**Figure 2. China's GDP and industrial growth rates, 1978-2000**



Source: China Statistical Yearbook, 2001.

**Figure 3. Changes in the composition of China's GDP, 1952-2000**



Source: China Statistical Yearbook, 2001.

## Structural change in industry

Two structural changes have provided much of the impetus for China's rapid industrial development since 1978: privatisation and greater international openness. The shift in industrial ownership structure from state-owned enterprises (SOEs) to 'non-state' enterprises started with creation of township and village enterprises (TVE) and other collectively-owned businesses, then foreign-funded enterprises, and more recently private domestic enterprises. Enterprises either wholly owned or controlled by government entities now account for less than 30% of industrial output. However, SOEs consume about two-thirds of China's credit resources, virtually all funds mobilised through formal capital markets, and employ about 50% of the urban workforce, signalling continuing problems of inefficiency and overstaffing.

This transformation of industrial ownership has contributed to growth in two ways, *i.e.* through shifting resources toward more efficient enterprises and by increasing competition. Competition has also been augmented by curtailing central planning mechanisms and moving towards market-based prices. Nearly 90% of retail prices are now completely market determined, the main exceptions being energy and other utilities. Increases in competition, however, have been uneven across industrial sectors. Protected industries -- featuring entirely or mainly SOEs -- include major utilities such as electricity and petroleum/gas extraction, but also mineral extraction, steel and other metallurgical sectors, automobile production, basic chemicals and tobacco.

The second structural change is the progressive opening of the Chinese economy to foreign trade and investment. China's average tariff rate fell from above 40% in the early 1990s to 15% at present. Since 1979, China has received a cumulative USD 347 billion in foreign direct investment (FDI). In recent years, foreign investment has averaged 4-5% of GDP. The bulk of FDI has come from Hong Kong, China; Chinese Taipei and other Asian countries with large ethnic Chinese populations. China has been less successful in attracting FDI from OECD countries. FDI has been largely concentrated in coastal provinces, which feature special economic zones (SEZ). Nevertheless, this performance has been impressive, particularly given that important industries are still closed to FDI and foreign investors are confined mainly to joint ventures.

The opening to international trade and investment has increased competition, spurred the growth of domestic labour-intensive industries and helped to develop China's exports. Consequently, China has emerged as an important trading nation, with total trade in USD 474.3 billion, accounting for around 4% of the world trade, in 2000. Since 1994, China has consecutively run annual trade surpluses, which led to a growing foreign currency reserve in USD 166 billion -- one of the largest in the world -- in 2000. Foreign enterprises in China have also been instrumental in developing China's export industries, particularly in recent years as FDI inflows have shifted toward capital- and technology-intensive export sectors. Foreign investment has also helped to raise industrial productivity and to improve industrial technology, know-how and worker skills. However, trade and investment liberalisation cannot by itself improve China's industrial competitiveness, which is dependent on extensive restructuring of firms and reallocation of resources. The benefits of liberalisation to particular sectors will rely not only on their theoretical comparative advantage but also upon their ability to restructure and upgrade operations to take advantage of market opportunities. In order for both Chinese and OECD industry to realise the benefits of liberalisation, the priorities for Chinese industrial reform continue to be:

- **Enhancing openness** -- there is significant room to improve China's FDI performance, both in quantitative and qualitative terms. This includes strengthening of intellectual property rights protection, establishment of market-based mechanisms for M&A, improvement in competition laws and their enforcement, reduction in administrative barriers, and further opening of protected industries.

- ***Reform of state-owned enterprises*** -- barriers to reforming large SOEs include the perceived ideological importance of maintaining a certain degree of state ownership in the economy and the fear of social unrest as a consequence of large scale layoffs. A social safety net is needed for the unemployed while managerial and government attitudes may be slower to evolve.
- ***Enhanced access to industrial financing*** -- financial reform and capital market development are essential to China's industrial development and further globalisation. There is a need to restore capital adequacy to financial institutions; create a more diverse and balanced system in which financial outlets other than state-owned commercial banks play a role; give greater latitude to foreign banks and financial institutions; and foster the modernisation of China's capital markets, including stock market and bond markets, with market access for non-state firms and enhanced investor protection.
- ***Real industrial restructuring*** -- industrial restructuring has not followed market principles, with the government heavily involved. Continued efforts should aim at restructuring the enterprise sector through consolidation and reorganisation and improved exit mechanisms.

## IMPLICATIONS OF CHINA'S ACCESSION TO THE WTO FOR OECD COUNTRIES

China's WTO accession will have implications for OECD countries and industries. Liberalisation should spur industrial restructuring in China with effects on exports and imports and expand opportunities for foreign investment as well as alliances and joint ventures between foreign and domestic firms. Some 37 WTO member countries requested bilateral negotiations with China regarding China's accession to the WTO. A number of bilateral agreements relating to industry and particular industrial sectors have been entered into (**Box 2**). While these bilateral agreements formed part of the process for negotiating the conditions for China's WTO accession, the concessions that China made in each of the bilateral agreements must be extended to all trade partners according to the most favoured nations (MFN) principle. Furthermore, the WTO national treatment clause requires that China does not put the goods or services or persons of other WTO members at a competitive disadvantage vis-à-vis its own goods, services and nationals. The following section discusses the implications of WTO accession for OECD industry in terms of trade, foreign investment, cross-border mergers and acquisitions (M&A) and international strategic alliances. Implications for particular industrial sectors are discussed in the Annex.

### Trade

OECD industrial trade with China stands to increase due to the many commitments that China has made in the WTO context and through bilateral agreements with OECD Member countries. China is now the world's ninth largest trading nation. Some 12 OECD countries, particularly Japan, the United States and Korea, are important trading partners for China. (**Figure 4**). The composition of OECD imports from China has undergone dynamic changes in the last 20 years. The share of food and beverages decreased from 18% in 1980 to 4% in 1998, that of textiles and apparel from 44% to 28%, and that of chemical products from 24% to 15%. The share of fabricated metal products and machinery -- including computers, electrical machinery and electronic appliances -- increased from 3% to 37% (**Figure 5**).

In preparation for WTO membership, China has through time liberalised its trade regime, slashing tariffs and removing a number of non-tariff barriers. The simple average Chinese tariff rate has been reduced from nearly 43% in 1992 to 15.3% at the beginning of 2001. One study predicts China's total imports will increase by USD 230 billion by 2005 owing to tariff cuts, elimination of non-tariff barriers and increased foreign investment (*Goldman Sachs*, 1999). The industrial sectors where OECD exports to China should increase include automobiles, machinery, ceramics and glass, textiles and clothing, footwear and leather goods, wood and paper, and products based on information and communications technologies (ICT). The elimination of multi-fibre agreement (MFA) quotas is expected to boost China's textile exports by 20% and apparel exports by as much as 200%.

## Box 2. Major Chinese bilateral WTO agreements related to industry

**China-U.S. Agreement** -- China will lower tariffs and eliminate systemic barriers to US exports, such as limits on who can import goods and distribute them in China, as well as barriers such as quotas and licenses on U.S. products.

- Tariffs cut from an average of 24.6% to an average 9.4% overall and 7.1% on US priority products.
- China will participate in the Information Technology Agreement (ITA) and eliminate all tariffs on products such as computers, telecommunications equipment, semiconductors, computer equipment and other high-technology products.
- In the automobile sector, China will cut tariffs from the current 80-100% level to 25% by mid-2006, with the largest cuts in the first years after accession. Auto parts tariffs will be cut to an average of 10% by mid-2006.
- In the wood and paper sectors, tariffs will drop from present levels of 12-18% on wood and 15-25% on paper down to levels generally between 5 - 7.5%.
- Under the chemical harmonisation initiative, tariffs will be set at 5.5 and 6.5% for products in each category.

**Elimination of quotas and licenses**-- WTO rules bar quotas and other quantitative restrictions. China has agreed to eliminate these restrictions within five years.

- Quotas: China will eliminate existing quotas upon accession for the top US priorities (e.g. fibre optical cable). It will phase out remaining quotas, generally by 2002, but no later than 2005.
- Quotas will grow from current trade levels at a 15% annual rate in order to ensure that market access increases progressively.
- Auto quotas will be phased out by 2005. In the interim, the base-level quota will be USD 6 billion (the level prior to China's auto industrial policy), and this will grow by 15% annually until elimination.

**Trading rights and distribution and related services** -- Trading rights and distribution are among the top concerns for U.S. manufacturers and agricultural exporters. At present, China severely restricts trading rights (the right to import and export) and the ability to own and operate distribution networks. China has agreed to liberalise trading rights and distribution services for most products, including imported goods, throughout China in three years. In addition, China has agreed to open up the logistical chain of related services such as maintenance and repair, storage and warehousing, packaging, advertising, trucking and air courier services, marketing, and customer support in three to four years.

**State-owned and state-invested enterprises** -- China has agreed that it will ensure that state-owned and state-invested enterprises will make purchases and sales based solely on commercial considerations, such as price, quality, availability and marketability, and that it will provide US firms with the opportunity to compete for sales and purchases on non-discriminatory terms and conditions. China has also agreed that it will not influence these commercial decisions (either directly or indirectly) except in a WTO consistent manner.

### **China-EU Agreement**

**Tariffs**-- China will reduce import tariffs on over 150 leading European exports - such as machinery, ceramics and glass, textiles, clothing, footwear and leather goods, cosmetics, and spirits. Agreed levels are generally around 8-10%.

**Motor vehicles** -- European carmakers, which are well established in China, will have greater flexibility to choose which types of vehicles they build. Approval thresholds of provincial authorities will be raised from USD 30 million to USD 150 million. China has agreed to eliminate the joint-venture restriction for engine production, upon accession.

**Monopoly state import/export restriction** -- China's state monopoly on importing crude and processed oil, and fertiliser (NPK), will be gradually opened to private traders, starting at accession. The state monopoly on exporting silk -- where China accounts for 70% of world production -- will be completely removed by 2005.

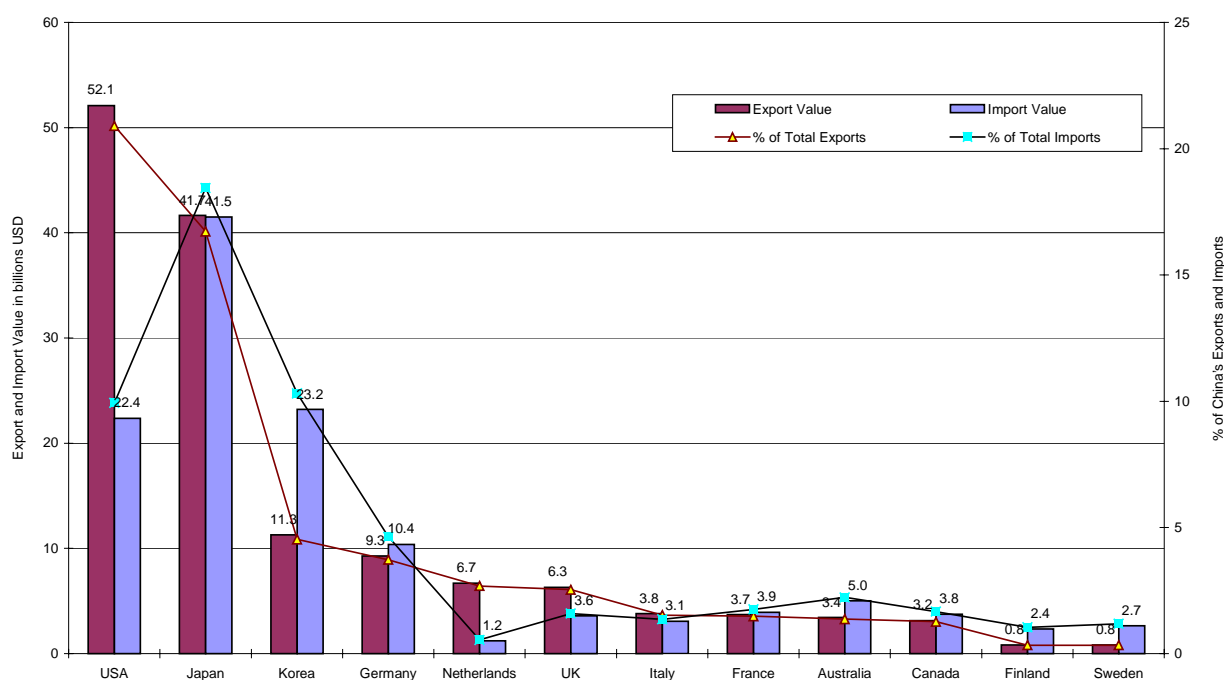
**Horizontal measures** -- China will cease to apply a number of measures that will distort trade and have macroeconomic effects, including export performance and local content requirements, and industrial export subsidies. China's government procurement system will be transparent, and will not discriminate between foreign bidders. China will abolish preferences to domestic producers in the fields of pharmaceuticals, chemicals, after-sale services, cigarettes and spirits.

Source: OECD (2001b).

Despite recent reductions in trade barriers, China remains a difficult market to penetrate for many foreign firms due to Chinese government policies that protect and promote domestic industries. Chinese trade policies generally encourage imports of products which are deemed beneficial to China's economic development and growth (and not produced in China), such as technology-based goods as well as machinery and raw materials used in the manufacture of products for export. Preferential trade status is often given to encourage priority imports. Goods and services considered low priority -- or which compete directly with domestic Chinese firms such as automobiles, petroleum refining and beverages -- may face an extensive array of tariff and non-tariff barriers, making it difficult to export such products directly to China. As a result, many foreign firms have established production facilities in China to gain market access.

**Figure 4. China's main OECD trading partners, 2000**

(OECD countries accounting for greater than 1% of China's exports or imports)



Source: *China Statistical Yearbook, 2001.*

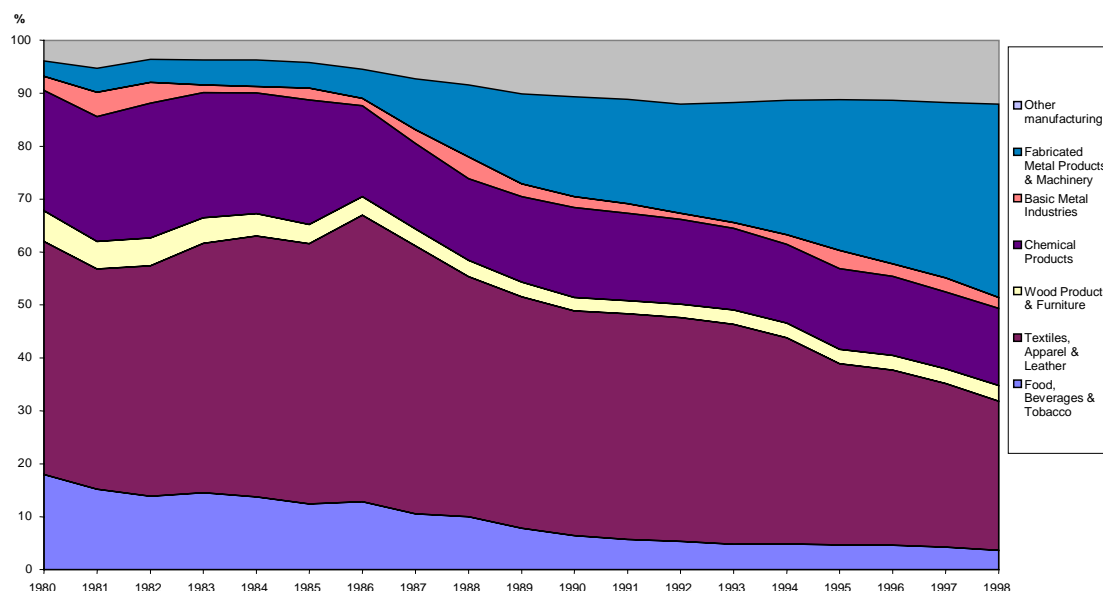
Certain OECD industries may face increased trade competition owing to China's entry to the WTO. In general, labour-intensive sectors where China already enjoys comparative advantage may expand following WTO accession. In particular, textiles and apparel, where MFA quotas will be abolished by 2005, will greatly benefit. However, the US-China agreement signed in November 1999 contains safeguard provisions which may delay the full liberalisation of textiles trade with China by the United States and other OECD countries. Other labour-intensive sectors such as toy making and shoe manufacturing, may

gain export share, and China's machinery and electronics industries, which account for more than 45% of China's exports, are expected to remain competitive in world markets.

Increased textile exports from China will most likely compete directly with exports from other low-income countries in OECD markets, resulting in the redistribution of export market shares among low-income exporters. On the other hand, China's consumer electronics products, such as television sets, are likely to compete as low-price substitutes for OECD exports, especially in low-income countries. Here, Chinese producers may benefit from cost advantages over some OECD producers. However, since China's exports are predominately fabricated products utilising imported materials and machinery, greater Chinese exports in these sectors will also lead to higher Chinese imports. For example, higher Chinese textiles exports will likely result in significant increases in imports of textile materials and synthetic fibre, mainly from OECD countries (*OECD 2001e*).

**Figure 5. Commodity composition of China's exports to OECD, 1980-98**

(% of total)



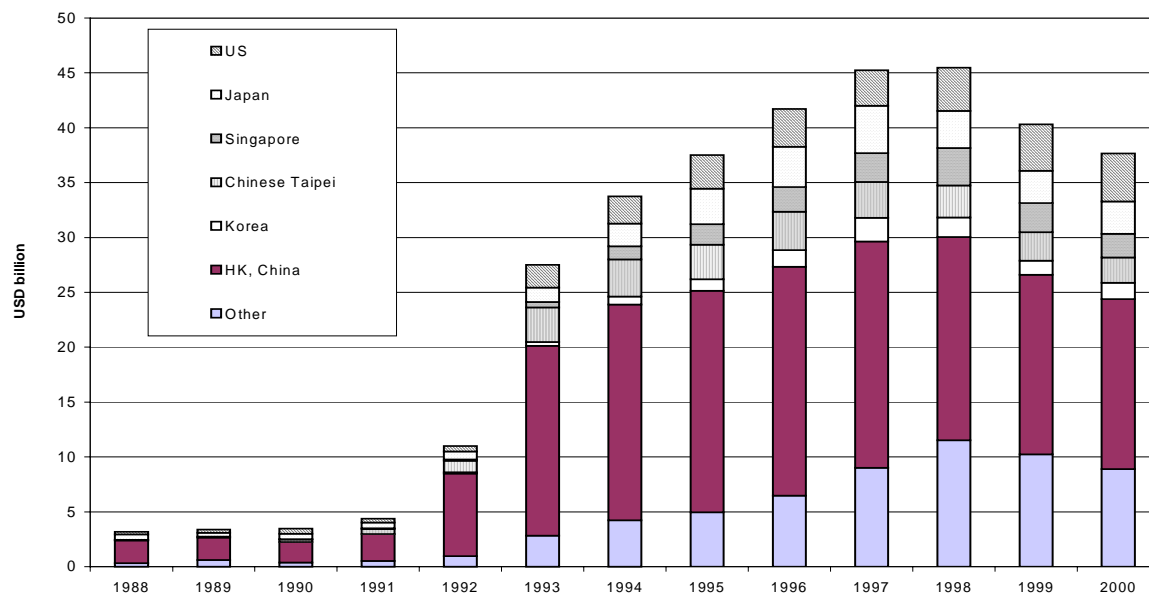
Source: Compiled from OECD Bilateral Trade Database, April 2000.

### Foreign direct investment

For the last two decades, China has progressively opened to foreign direct investment (FDI) and improved the general investment environment. As a result, China became the largest FDI recipient among developing countries and the second largest FDI recipient in the world, after the United States, in 1998. FDI inflows more than doubled from USD 11 billion in 1992 to over USD 27 billion in 1993 and peaked in 1998 at USD 45 billion. Recent years have seen slight decreases in FDI inflows, down to USD 40.7 billion in 2000 (**Figure 6**). The OECD horizontal China study predicts that following China's accession to the WTO, FDI inflows are expected to increase moderately in the short-term and rapidly in the medium and long-term, reaching an estimated annual FDI inflow of USD 100 billion by 2010 (*OECD 2001c*). The key conditions for realising this potential are that China successfully implement its WTO commitments, further

undertaking trade and investment liberalisation and domestic economic reforms, including enforcement of intellectual property rights protection.

**Figure 6. FDI inflow into China, 1988-2000**



Source: *China Statistical Yearbook*, various issues.

While remaining an important host for foreign investment from Hong Kong, China, Chinese Taipei, and other East and South-East Asian countries, China actively seeks to become an increasingly important destination for investments from OECD countries. The United States, Japan and Korea as well as countries of the European Union are already among major investors in China. In 1999, EU investment as a whole (particularly from the United Kingdom and France) surpassed both the United States and Japan in terms of amount and as a share of the total. Following China's accession to the WTO, foreign investment in services is expected to increase significantly relative to that of manufacturing. FDI inflows into China's services sector -- especially finance, insurance, telecommunications, domestic commerce and related industries -- will grow largely due to commitments made in the WTO context (**Box 3**).

Liberalisation in China implies the creation of a market-based investment regime, with restrictions on foreign investment being gradually reduced and eventually removed. This in turn means that OECD firms will have increased freedom in making investment-related decisions in China. For example, the removal of conditions on transfer of technology, which are often attached by the Chinese government in approving foreign projects, will allow foreign companies more autonomous decision-making regarding transfer of advanced technologies to China. The abolition of local content requirements will give OECD firms more freedom to decide whether to produce intermediate goods in China or import from abroad. The removal of currency and export restrictions will allow foreign firms to sell their China-made products in China or in export markets. However, it may take up to five years or more for China to implement its WTO commitments, and there will be added difficulties implementing these changes at the provincial and local levels.

In addition, competition among foreign firms will likely increase. Foreign companies in China, especially those that are engaged only in production, are competing to set up export-oriented subsidiaries. Foreign companies may compete more vigorously for a foothold in China, leading to increased research and development and transfer of advanced technologies to their Chinese operations. However, under the pressure by domestic industries, tax privileges of foreign firms in China is likely to be phased out in the face of implementing "national treatment" provisions. Currently, foreign firms enjoy a preferential corporate income tax of 15% in special economic zones (SEZ) and state-level development zones, as compared to a standard rate of 33% for Chinese firms. The exact rates of corporate income tax for foreign invested firms are still under debate, with some favouring a 25% preferential rate and others the full 33% rate.

### Box 3. China's FDI-related WTO commitments

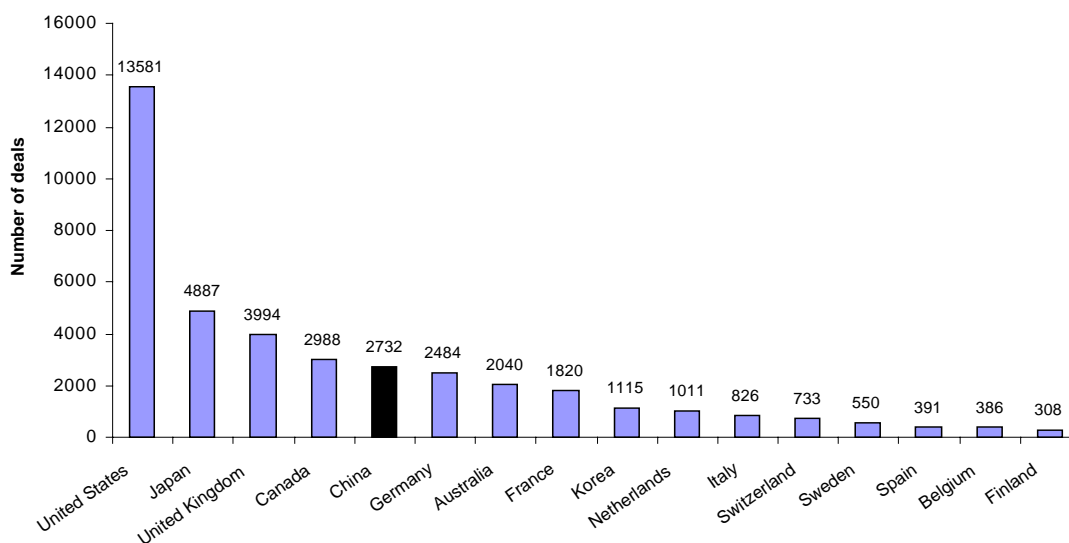
China has made substantial commitments in investment liberalisation and has agreed to comprehensively implement the *Trade-Related Investment Measures* (TRIMS) agreement after entering into the WTO. China's main commitments relating to FDI include:

- Apply non-discriminatory laws and policies to all enterprises, both domestic and foreign, in China and between domestically produced and imported products, including pricing policy and tax policy.
- Do not impose, apply, or enforce laws, regulations or measures relating to technology transfer that are inconsistent with WTO rules and agreements on investment and Intellectual Property Rights (IPR).
- Eliminate all export subsidies that are contingent on export performance or upon the use of domestic goods over imported goods.
- Eliminate requirements regarding foreign exchange balancing and trade balancing, foreign investment requiring technology transfer, local content, research and development, and export performance.
- Provide full trading and distribution rights including the ability to provide auxiliary services to distribution for foreign firms in China.
- Liberalise trade and investment in key service sectors (over various transitional periods), including distribution, value-added telecommunications, insurance, banking, securities, and professional services, as well as lift joint-venture restrictions on large department stores and chain stores.
- Establish independent tribunals, contact points, and procedures for prompt review of administrative decisions and measures relating to the implementation of China's WTO commitments.

### Strategic alliances

Strategic alliances between Chinese and OECD firms are increasing rapidly as OECD companies strengthen their foothold in the vast Chinese market and seek to take advantage of low labour costs. Many alliances are joint ventures reflecting Chinese restrictions on establishing a fully or majority-owned foreign company in certain industries. In the 1990s, data indicate there were about 4 560 cross-border alliances involving Chinese firms (*OECD, 2001a*). In 1995-2000, Chinese firms joined more than 2 700 cross-border alliances, representing one-tenth of world business alliances (**Figure 7**). The majority of alliance partners for Chinese firms are from the United States, European Union and Japan. While alliances between Chinese and Japanese firms are decreasing, alliances with US and European firms are growing.

**Figure 7. International alliances by nationality of participating firms (1995-Oct 2000)**



Source: Compiled from Thomson Financial database.

Most international alliances with Chinese companies have been for producing and exporting labour-intensive manufactured goods, including clothing, automobiles, steel, pharmaceuticals and consumer products. While it is expected that such operations will continue, alliances in service sectors and for distribution, marketing and research and development are increasing. In 1995-99, Chinese firms participated in 120 telecommunications, 30 airline and 25 insurance alliances. Companies in Hong Kong, China participated in another 60 deals in telecommunications, 17 in airlines and 11 in insurance. OECD service companies aiming at entering the Chinese market are forming a growing number of strategic alliances with local distribution networks.

OECD companies are entering into more technology-based alliances with Chinese firms to both service the Chinese market and as part of their global business strategies. However, the continuance of the trend towards technology-based alliances will largely depend on progress in protection of intellectual property rights (**Box 4**). Some 32 foreign companies established R&D facilities in China as of 2000, an increase from two in 1994 (*STDRWP*, 2000). These investments tend to concentrate on knowledge-intensive industries, including software, telecommunications, biotechnology and chemicals. They usually involve R&D subsidiaries of foreign multinationals, product development departments of foreign firms or setting up joint R&D facilities with Chinese research institutes and universities. It appears that foreign companies are aware of the long-term potential of the Chinese market and have realised the value and the cost advantages of the Chinese R&D workforce. In addition, the need to make product adaptations for Chinese markets has made joint R&D and product development necessary for certain sectors such as software.

### **Cross-border mergers & acquisitions**

Largely due to government restrictions, cross-border mergers and acquisitions involving Chinese firms have not been extensive, but are now increasing. During the 1990s, there were an estimated 410 cross-border M&As in China involving USD 9.3 billion in value, which represented 1% in number and

3.5% in value of the world total. In recent years, there have been about 70 cross-border M&As per year involving Chinese firms, with transactions in the latter half of the 1990s more than three times that in the first half of the 1990s (**Figure 8**).

#### Box 4. Intellectual property rights in China

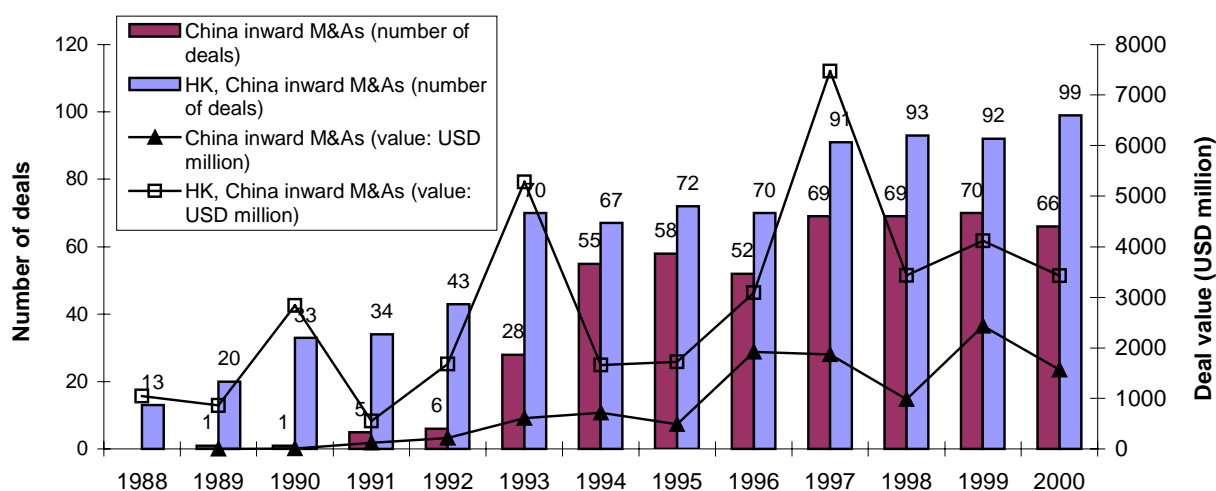
As China becomes a member of the World Trade Organisation, IPR protection will be brought in line with WTO standards, particularly the Trade-Related Intellectual Property Rights Agreement (TRIPS). This will create the stability needed for OECD companies to better integrate their operations in China into their global business strategies, particularly through R&D alliances with Chinese partners. It will also mean that the cost for Chinese enterprises to access foreign technologies will increase as they can no longer copy and imitate the patented technologies and processes of foreign companies. Foreign firms are likely to reassess their decisions on technology transfer to China.

While various Chinese IPR laws are being improved upon, the enforcement of existing legislation may present a more urgent problem than the legislation itself. The central government is making some progress in improving the enforcement of IPR laws, in particular in fighting against counterfeiting of the intellectual products. However, uncertain and unreliable enforcement in China often occurs at local levels, giving rise to difficulties in investigation of cases, and influencing court rulings in favour of local defendants.

Nevertheless, OECD investors are now increasing their foothold in the Chinese technology market. The number of invention patent applications filed by foreigners grew faster than those by the Chinese in the latter part of the 1990s. In 1997 and 1998, foreigners accounted for 62% and the Chinese 38% of invention patent applications. Between 1985 and 1997, China granted 21 252 patents to foreigners. Japan accounts for 31% and the United States 28% of patents, with Germany in third place. Seven European countries, including France, the Netherlands, Switzerland and England, together accounted for 31%. Korea, which now ranks fourth in patent applications, entered the league of top ten countries in 1993 and then saw applications increasing 67% per year between 1993 and 1997. This indicates the increasing effort on the part of OECD firms to seek legal protection of their intellectual property rights when doing business in China.

Source: MOST (1999).

Figure 8. Cross-border M&As in China, 1988-2000



Note: January to August 2000. Completed cross-border M&A transactions with 10% or more capital holdings.  
Source: Compiled from Thomson Financial database.

Chinese firms are not highly visible as an acquisition target. Exceptions are found in the automobile and airline sectors in which there were 14 deals in the 1990s reflecting acquisition of production facilities in China. Hong Kong, China tends to attract more investment through M&As than mainland China as a whole, reflecting its significant role in high value-added services, especially banking and telecommunications. In the telecommunications service sector, some 40 Hong Kong, China firms were acquired in the 1990s by US, German, UK, Canadian Italian and Brazilian firms. In banking, 13 Hong Kong, China companies were acquired from 1995 through October 2000.

Cross-border mergers and acquisitions in China have been highly restricted and subject to government approval (**Box 5**). In general, foreign acquirers needed a registered business presence in China, *e.g.* a joint venture with a local Chinese firm, to carry out acquisitions of Chinese assets. Full mergers between foreign-owned companies and Chinese firms were not allowed, although mergers between foreign invested enterprises (FIE) were possible. Even permissible (partial) acquisitions of Chinese assets largely depended on government decisions, which varied significantly by case, sector and region. In addition, M&As in China have been limited by the difficulties posed by China's imperfect legal frameworks as well as differences in corporate management styles and cultures. These factors have led foreign investors to prefer greenfield investment in China in the past.

The prospect for cross-border M&As may improve as a result of WTO entry and reform of relevant laws in China. In addition, the Chinese government has stated in its 10<sup>th</sup> Five-Year Plan its intention to improve and stipulate relevant laws and regulations to encourage foreign investors to contribute to state-owned enterprise reform through cross-border mergers and acquisitions. It has been estimated that in the medium-term, cross-border mergers and acquisitions may have the potential for attracting an additional USD 40 billion a year FDI flows into China (*UNCTAD*, 2000) if China can adequately improve conditions for cross-border M&As after WTO entry.

## Box 5. China's regulatory environment for cross-border M&As

### The pre-WTO regulatory regime for cross-border M&As

**Purchase of registered capital in a foreign invested enterprise (FIE).** The registered capital in an FIE can be sold, either to one of the other equity holders in the joint-venture (if applicable) or to a third party, under the conditions that the equity sale would not result in the entry of foreign ownership into restricted industries, and/or to lead to a fall of foreign ownership to below 25% of the registered capital of a joint venture.

**Asset purchase.** Chinese law generally does not permit the acquisition of a domestic company's productive assets by a foreign entity unless the foreign acquirer has established or concurrently establishes a registered presence in China, with the foreign investor holding at least a 25% interest. All acquisition transactions are subject to government approval, in accordance with sectoral policies for FDI.

**Share purchase.** Since 1995, China's law allows foreign investors to acquire shares in a Chinese company, which may be a listed or an unlisted joint stock limited company. Since almost two-third of China's top 500 companies have yet to be listed and 67% of the market capitalisation of all listed companies in China are non-tradable shares, acquisition through share purchase has been small. However, this may change, as the number of joint stock limited companies is increasing in China.

**Mergers.** China's Company Law allows two types of mergers. First, merger by absorption, in which one company absorbs one or more other companies and the absorbed companies are dissolved; and second, merger by establishment, in which two or more companies are merged into a new company and the parties to the merger are dissolved. Mergers directly involving foreign companies and China's domestic companies are still not possible in China. But as foreign investors seek to restructure their existing Chinese holdings, there have been a growing number of mergers among foreign-invested enterprises.

### The prospect for regulatory changes

The commitments that China has signed for its WTO membership, especially those related to the opening up of the restricted sectors to FDI, and restrictions on forms and limits of foreign ownership, etc., will have important implications for improving the regulatory environment for cross-border M&As in China. China is currently revising a large number of laws and regulations to bring them in line with relevant WTO rules. Revisions of laws such as the Law on Chinese-Foreign Joint Ventures and the Law on Foreign-Funded Enterprises, Company Law and regulations on the stock exchange, etc. are expected to have direct impacts on improving the regulatory conditions for cross-border M&As.

Meanwhile, the Government has adopted a new policy in its 10<sup>th</sup> Five-Year Plan to encourage FDI in the form of cross-border M&As, as a means for transforming state-owned enterprises, and for expanding channels of FDI and technology transfer. Based on this policy, the Government is working on improving regulatory conditions for M&As.

*Source:* OECD (2001c), China Economic Information Net (CEI) and McKinsey Quarterly, April 2002.

## CONCLUSIONS

China's entry to the WTO presents vast opportunities for OECD industries and firms in terms of trade and foreign investment, including greenfield investments, alliances and M&As. China's overall trade and investment environment should improve towards a level-playing field for foreign and domestic firms, greater freedom in business decision-making by foreign investors, improved protection of intellectual property rights, reduced tariffs and opening up of restricted sectors and the domestic market. OECD firms could benefit from increased foreign investment in China, particularly in service sectors such as telecommunications and financial services, and greater exports to China, particularly ICT-based goods. Some Chinese exports may also grow and pose new competitive challenges to OECD firms in sectors such as textiles, steel and consumer electronics.

However, the liberalisation process in China could be slow and certain impediments to foreign trade and investment will remain. Key obstacles to improving overall industrial performance -- such as continued government interference in enterprise management, poor financial discipline, and restrictions on exit and other modalities for redeploying resources -- need to be addressed. Some resistance to liberalisation within the government and the enterprise sector may persist, which implies that the implementation of China's commitment to deregulate its economic system may not proceed smoothly. Furthermore, the industrial dynamism imparted by previous structural shifts seems to be weakening. China's main industrial problems at present include: 1) low efficiency of SOEs in many industrial sectors; 2) serious overcapacity in some sectors coupled with lack of production capacity for important industrial inputs; 3) insufficient innovation and technological capabilities in industry generally; 4) an underdeveloped services sector which accounts for only 28% of GDP; and 5) lack of a strong small and medium-sized enterprise sector. These structural deficiencies need to be overcome in order for both China and OECD countries to realise the benefits from China's WTO accession and trade and investment liberalisation.

## ANNEX: SECTORAL IMPLICATIONS OF CHINA'S WTO ACCESSION

China's opening to international markets will force substantial adjustments in Chinese industry as well as provide important opportunities to OECD firms. However, the trade and investment implications vary by industrial sector (**Table 1**). Chinese production and exports in labour-intensive sectors such as textiles are expected to increase markedly (OECD 2001*b*). A number of capital- or technology-intensive industries -- such as automobiles and segments of the chemical and metallurgical industries -- may lose ground to foreign competition. Foreign direct investment, particularly in services, is expected to rise substantially. Higher foreign investment will create jobs but will put competitive pressure on domestic enterprises, even in sectors where China has a comparative advantage.

**Table 1. Short-term sectoral impacts of China's WTO entry**

INDUSTRY SECTOR	OECD IMPORTS	OECD EXPORTS	OECD INVESTMENT
Textiles	↑	↑	→
Steel	↑	↑	↑
Consumer electronics	↑	↓	↑
Motor vehicles	→	↑	↑
ICT-based sectors	→	↑	↑
Telecommunications services	→	↑	↑
Other services	→	↑	↑

*Notes:* ↑ increase; ↓ decrease; → no significant change.

*Source:* Analysis by the OECD Secretariat.

### **Textiles**

China is one of the largest textile and apparel producers and exporters in the world. Relying on low labour costs, the Chinese textile industry is competitive in low value-added garments, which account for 70% of total textile exports. Much of China's garment exports are produced by foreign joint ventures or township and village enterprises (TVEs) in coastal areas. While the textile and apparel industry in China remains one of the most competitive sectors in the international market, it faces a number of structural weaknesses:

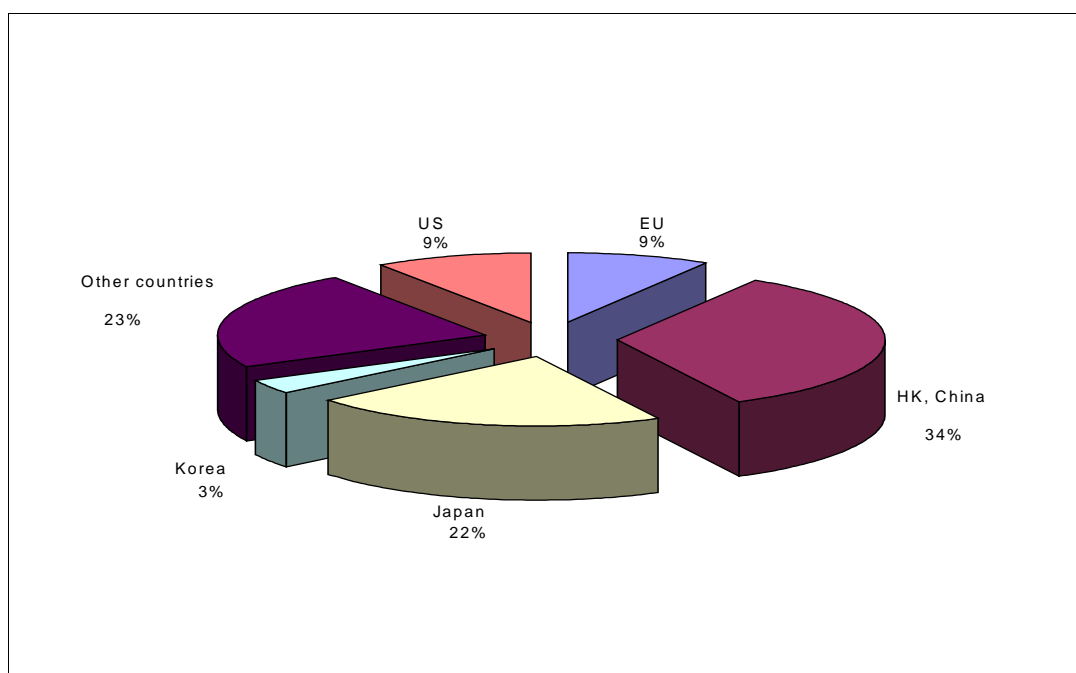
- The Chinese textile industry is dominated by SOEs, many of which suffer from losses or low profitability due to excess capacity and operational inefficiencies.

- China's textile sector lacks high value-added, high quality products to compete with OECD producers. China's chemical fibre industry, which provides the textile industry with important raw materials, is inferior to that of OECD countries such as Japan, and Korea, in terms of technology, product quality and cost-efficiency. As a result, China is one of the largest textile importers in the world.
- While low labour costs are a comparative advantage, labour productivity in textiles is only about 1/20 that of OECD countries. Meanwhile, China is facing increased competition from other low-income producers -- including India, Pakistan, Indonesia and Vietnam -- which have even lower labour costs.
- Smaller enterprises in the textile sector are disadvantaged in their access to financing, export markets and market information because of the monopoly of the state-owned import and export system in China.
- Chinese textiles suffer from a lack of technology, innovation and new product development, which seriously affects their potential to move up the value-added chain.

OECD countries -- especially Japan, the United States, EU countries and Korea -- are important export markets for Chinese textiles (**Figure 9**). However, in all these markets, China is facing strong competition. Following the Asian financial crisis, China lost market share in Japan and Korea to Indonesian, Vietnamese and Cambodian producers. In Europe, China has lost market share to Turkish and African exporters, while in the US market, where Chinese textile products are currently subject to import quotas and rather high import duties (17.5%), China is disadvantaged relative to Mexico, which benefits from being a member of the North American Free Trade Area (NAFTA).

**Figure 9. Main markets for Chinese textile exports, 1998**

(% of total)



Source: Chinese Customs Statistics (1998).

WTO entry obliges China to reduce its textile import tariffs from 25% to 9%, with varied effects on different categories of textile products. While tariff reduction will not greatly affect the enterprises that produce lower-end textiles, those producing higher-grade materials and fabrics, especially chemical fibres, will face increased competition from OECD producers, especially Japan and Korea, but also Chinese Taipei. Increased competition will accelerate the restructuring of the textile industry, especially SOEs in high value-added sectors, *e.g.* textile raw materials and high quality clothing. This should offer new business opportunities to OECD firms with regard to: exports of raw materials and inputs; exports of machinery and equipment for textiles and apparel production; and opportunities for joint ventures with Chinese producers.

## Steel

In 1996, China became the world's largest crude steel producer. The iron and steel industry is one of the most important sectors in China, accounting for 6.5% of value-added and 5.5% of employment in manufacturing. WTO accession should lead to increased steel investment in China as well as to higher Chinese steel exports. However, in light of the current crisis in the international steel trading system -- which is characterised by overcapacities, low prices and huge inventories -- the integration of the Chinese steel industry into the global steel market comes at a very critical juncture.

WTO accession and trends in domestic demand should favour OECD exports of certain types of higher-grade steel to China. The average tariff rate on steel products will be reduced by approximately 0.4% per year. Import quotas and import licensing systems will be eliminated and import trading rights will be liberalised. Subsidy disciplines will be established. Domestic steel demand is expected to increase with a greater portion supplied by imports. In 2000, Chinese consumption was close to 16% of world steel demand. China is the world's second largest net importer of steel -- with net steel trade of 10 million tonnes in 2000 -- mostly high value-added steel products. The market share of domestic steel in total consumption is now over 90%. However, steel consumption per capita at 93 kg is still well below the world average at 125 kg in 1999. The expected increase in construction investment in China, particularly for infrastructure projects in less developed western regions, as well as growing demand for durable goods such as automobiles, household electric appliances, etc, in the world's most populous country point to an enormous potential for long-term growth of domestic steel demand.

China's steel exports are estimated around 7.3 million tons in 2001, 30% down from their highest level, 10.7 million tonnes, in 2000. China's steel exports will benefit from permanent Most Favoured Nation status with all WTO members and national treatment of the distribution of imports from China. Chinese steel exports to world markets should increase, but this is mostly crude steel. China is not competitive in the higher-quality products markets that OECD steel industries focus on.

Trade and investment liberalisation should also lead to a significant increase in foreign direct investment in the Chinese steel industry, bringing new technologies and processes. Increasing market demand for high grade steel products will arise from the automotive, machinery and equipment, and electronic appliance sectors. A more competitive structure of the domestic steel industry was achieved through mergers and acquisitions and closure of non-viable small units in the 1990s. The number of steelworks was reduced from more than 2 500 to under 300. A number of joint ventures and strategic alliances with foreign partners have been undertaken in recent years. A priority is to increase the production of continuously-cast steel, which accounted for 69% of output in 1999, well below the levels in advanced OECD countries. Another focus is to increase labour productivity in the steel industry, which is less than one-fourteenth that of the leading OECD producers, by reducing the workforce.

## Consumer electronics

China ranks third in world production of household electronic appliances, following the United States and Japan. In the last two decades, the Chinese consumer electronics industry has grown rapidly with output increasing 20-50% per year for most products. Through intensive internal competition, Chinese brands dominate the domestic market, accounting for 95% of the market for refrigerators, 83% for washing machines, 74% for air-conditioners, 81% for colour television sets and 71% for microwave-ovens (IIE, 2000). The intensified competition that follows China's WTO entry is likely to lead to another round of industry consolidation and enterprise restructuring, and a reduction of tariffs will lower the cost of imported components. Although there will be more opportunities for investment by OECD companies, competitive, low-cost Chinese electronics should continue to appear on world markets.

Chinese exports of consumer electronics have increased, reaching USD 6.1 billion in 2000, with low-technology products -- benefiting from low-cost materials and labour -- accounting for the bulk of exports. A few domestic giants dominate the industry, and they are paying increasing attention to technology development. However, restructuring has been accomplished through mergers of existing capacity rather than reducing inefficient capacity. This has led to overcapacity, which, for many products, is around one fold more than market demand. Chinese markets for consumer electronic appliances such as television sets, refrigerators and washing machines have become saturated, with new demand mainly for updating.

This sector has been one of the largest recipients of FDI inflows in recent years, as foreign manufacturers have moved their production base to China to lower production costs and enhance competitiveness. For example, Japan's Toshiba Corp. moved its entire television production operation to China in April 2001. China also accounted for about 90% of General Electric's overseas production in 2000, compared to 5% in 1997. Foreign production is highly concentrated on manufacturing for export and on traditional, low-value added products. Although foreign firms still have a very small market share, they rely on their technology advantage to compete in upper market niches for higher-technology products.

Chinese consumer electronics producers are also looking into opportunities to invest abroad and making efforts to acquire international certificates for the quality, safety and environmental standards of their products; to improve the technology content of their products; to build up brand-name reputations; and to establish international distribution channels, marketing networks and strategic alliances. China's WTO accession could help open up more opportunities for Chinese consumer electronics producers to go international.

## Motor vehicles

China now ranks 10<sup>th</sup> in world production of all types of motor vehicles. WTO accession will mean increased competitive pressures and restructuring for the long-protected Chinese vehicle sector, while opening up investment opportunities for OECD companies. Automobile tariffs are to be reduced from 80/100% to 25% six years after WTO entry, while tariffs on auto parts will fall to an average 10%. China has committed to a number of other trade and investment reforms in the motor vehicle sector (**Box 6**).

The Chinese domestic motor vehicle market has huge potential. As international experience indicates, when a country's GDP per capita reaches USD 1000, private car usage grows rapidly. China's GDP per capita reached USD 870 in 2000, and it is projected to grow to USD 1000 in 2003 and USD 1150 in 2005. It is predicted that car demand in China may reach 2 million by 2005 and 4 million by the year 2010, almost 17 units per thousand people (Zhai, 2001). However, until now car consumption has been depressed by two factors. First, domestic car prices are prohibitively high due to government policies, some 1.5 to 2.5 times higher than the C.I.F price of the comparable imported products. Second, regulatory obstacles and

taxes add to car costs. More than ten procedures and a dozen permits are needed for car registration, while additional taxes constitute about 1/3 of the final sale price. In addition, there are strict administrative regulations imposed by local authorities.

#### **Box 6. China's WTO commitments related to motor vehicle industry**

Allowing non-bank foreign financial institutions to provide automobile financing.

- Commitments regarding importation, distribution, sale, and maintenance and repair of automobiles.
- Eliminate production restrictions on motor vehicles, freedom to determine product range within 2 years of accession.
- Reduction of red tape, as provincial authorities will be empowered to authorise investments in the sector worth up to USD150 million (currently USD 30 million) four years after accession.
- Wholly foreign-owned enterprises will be allowed in engine manufacturing.
- Removal of additional restrictions on the operations of foreign auto joint ventures in China.

Source: OECD (2001c).

The Chinese government has given high priority to developing an indigenous auto industry, using high tariff rates and various non-tariff barriers. In addition, many provincial governments consider automobiles their primary sector, investing substantially in local auto plants. The Chinese auto industry has a production capacity of 2.5 million motor vehicles but operates at about 70% capacity. China also produces 3.2 million agricultural vehicles and 11.2 million motorcycles per year. There are currently more than 120 auto firms in China, of which only five have a production capacity of over 100 000 vehicles a year. There are more than 3 000 companies producing engines, components and spare parts.

National and local protectionism have led to the proliferation of vehicle producers, low quality products, low economies of scale and distortions in market competition. Production scales are far below the international norm, resulting in extremely low productivity, a technology level more than 20 years behind OECD producers, and unclear property structures of auto companies owned by different government agencies. In anticipation of China's WTO entry, the government has promoted rationalisation of the auto industry through the formation of three backbone auto groups including the First Automotive Works (FAW) in Changchuan, the Shanghai Automotive Industry Group (SAIG) and the Dongfeng Motors Group in Hubei. A special *Financial Times* report on China predicts that only 40 of the 120 domestic vehicle manufacturers will remain in business.

Attracted by the huge market potential, almost all the leading OECD auto companies are currently engaged in the Chinese market. Since production started in 1985, Shanghai Volkswagen has become the market leader in the sector and together with a second joint venture of the VW-group (FAW-VW), the Volkswagen joint ventures have over 50% market share. The potential of China's heavy-duty truck market has also attracted international automakers. China's leading tire company, Shanghai Tire and Rubber Co., and the French firm Michelin signed agreements to form a USD 200 million joint venture in Shanghai. However, only companies who can challenge the incumbents' positions by outperforming the relatively efficient, large-scale joint venture manufacturers such as SAIC-Volkswagen will have a chance to succeed.

The auto parts sector, which is the most fragile part of China's auto industry, is expected to face the biggest challenge from foreign products after WTO entry. However, in the long-term, Chinese auto-related industries stand to benefit in terms of more immediate and open access to foreign resources. The competitiveness of the Chinese automobile industry should be enhanced through technological upgrading, product development, and improved management know-how as a result of increased FDI inflows. Market liberalisation of financial services and sales and distribution of the auto industry can provide further opportunities for interested OECD investors in China. Still, much depends on adjustment of vehicle-related taxes and charges, abolition of prohibitive regulations, simplification of administrative procedures for car registration and establishment of a credit system for financing car purchases.

### **ICT-based sectors**

Growing by an annual average of 20% since the early 1980s, China's information and communications technology (ICT) equipment industry is becoming one of the world's largest. In particular, telecommunications equipment is one of the most rapidly growing sectors in China and a major source of export expansion. The Chinese government would like the ICT manufacturing industry to become the "pillar" of the national economy and to catch up to the production scale of the United States and Japan. To fulfil this objective, the Chinese government plans to invest USD 500 billion in the information technology sector during the period between 2001 and 2005. China's Tenth Five-Year Plan (2001-05) predicts the output value of ICT products will reach USD 303 billion by 2005 and foreign exchange earnings will reach USD 100 billion. If these goals are reached, OECD industry could face new competitive challenges in ICT products. However, a simulation study by the Chinese State Council's Development Research Center suggests that the Chinese ICT sector could well be a loser after WTO entry (*Li and Zhai, 2000*).

China signed the WTO *Information Technology Agreement (ITA)* and is obliged to eliminate tariffs on 200 types of information technology products, including computers and computer components, telecommunications equipment and parts, semiconductors and components, software including disks, cassette and compact disks, and scientific research equipment. Elimination of tariffs will lead to an increase in the import of ICT products which, together with improved protection of intellectual property rights, will generate greater competitive pressures on Chinese manufacturers. Competitive OECD companies will stand to benefit from the elimination of tariffs on ICT products.

China is the world's most rapidly growing market for telecommunication services and products. For example, web users account for only 2% of the population in China compared to 45% in the United States and 21% in Korea. The penetration of personal computers in China is very low -- around 1% currently -- but expected to rise to 2.3% by 2002. The penetration of mobile phones is relatively higher -- close to 3% in 1999 -- and is expected to rise to almost 7% by 2002 (*Perkins and Shaw, 2000*). This represents a vast market opportunity for OECD producers.

Competition will further intensify in the ICT industry in China, in part between foreign and domestic producers. Foreign investment is already significant and is expected to grow further after China's WTO entry. Major international players in the ICT sector such as Motorola, Ericsson, Nokia and Siemens have heavily invested in China and plan to increase their investment. Construction is underway for Motorola (China) Electronics' USD 1.9 billion semiconductor plant - one of the biggest in the world - in Tianjin, while Phillips also plans to build a USD 1 billion semiconductor plant in Suzhou. Ericsson has business expansion plans that will create 29 000 new jobs in the next five years in China, and Motorola is to invest an additional USD 6.6 billion in the coming five years. More multinationals -- including Microsoft, Nokia, Intel, IBM and Matsushita -- are also investing in research and development capabilities in China to strengthen their competitive positions.

## Telecommunications services

As the world's fastest growing market for telecommunication services, China's WTO entry will open up wide-ranging opportunities for OECD firms (**Table 2**). China has signed commitments to open up the telecommunications services sector in accordance with WTO's *Basic Telecommunications Accord*. In the mobile telephony market, China will allow foreign investment up to 25% in three major metropolitan areas -- including Beijing, Shanghai and Guangzhou -- in the first years of WTO entry gradually increasing to 49%, while eliminating geographical restrictions by 2005. In the paging and value-added network (VAN) services -- including Internet -- China will allow 49% foreign ownership in the first year and 50% in the second year of accession. There will be 49% foreign ownership in 6 years in international and domestic mobile services, and within 1 year of accession up to 35 % and within 3 years of accession up to 49% foreign ownership in local mobile operators.

However, China needs to improve its telecommunications infrastructure in terms of capacity, network interconnectivity and unbundling in order to realise the service potential. The penetration rate for telephone services is now only 15%, creating potential for power line communications, high speed networks, leased line services for voice and data, and optical cable. However, since local call services are monopolised by China Telecom, and because profits are expected to be quite low compared to the investments required, local call services may not attract new entrants. Long-distance call services, which are currently under a duopoly of China Telecom and China Unicom, may be somewhat more interesting.

The mobile telephony sector is currently a duopoly of China Mobile and China Unicom. Foreign firms may undertake manufacturing of terminals or facilities and there will be an increase in strategic alliances among service providers with equity shares. Prospective industries include the Code Division Multiple Access (CDMA) equipment industry and roaming services. The value-added telecommunications market, which is the only area that allows foreign investment under current Chinese regulation, has high growth potential with possibly rapid expansion in Internet-related services. Prospective industries include Internet-telephony solutions, Internet content, Internet equipment and wireless Internet businesses.

## Other services

In addition to telecommunications services, service sector liberalisation will present a major investment opportunity for OECD companies in China (**Box 7**). China's FDI policy previously directed the bulk of investment (nearly 60%) into manufacturing sectors. Services are ripe to develop, but competition will be tough and liberalisation may take five years or more.

In general, China's banking and financial market systems are now underdeveloped. The financial system is virtually entirely state-owned, with the four major state owned commercial banks heavily oriented toward state-owned enterprises. Although equity markets account for a comparatively large share of national income, the state still controls about two thirds of listed companies and the standards of transparency and investor protection fall short of international standards. Bond markets are fragmented and illiquid. Lack of trained personnel, divergences from international supervisory norms and the persistence of perverse incentive system still impede the development of financial sector. Despite dramatic reforms and improvement since mid-1990s, financial system capabilities remain weak, becoming an impediment to real growth, both directly and by slowing business sector restructuring and foreign investment.

**Table 2. Prospects for Chinese ICT services after WTO accession**

<b>Services Areas</b>	<b>Market Attractiveness</b>	<b>Prospective Areas</b>
Local Telephony Services	<p>Monopolised by China Telecom; no large change expected after WTO entry</p> <p>Low profits; incentives not high for entering the market</p> <p>Regulations on foreign firms</p>	<p>Power Line Communications (PLC) equipment as alternative telecommunications network</p> <p>Broadband Wireless Local Loop (B-WLL) industry</p> <p>High-speed broadband networks such as Asymmetric Digital Subscriber Line (ADSL)</p>
Long-distance Telephony Services	<p>Duopoly by China Telecom and China Unicom</p> <p>Some marketability compared to the local telephony services, but incentives low for the market entry</p> <p>Basic framework for fair competition should be established regarding interconnectivity and unbundling</p>	<p>Optical cable industry</p> <p>Leased line services</p>
Mobile Telephony Services	<p>Duopoly by China Mobile and China Unicom</p> <p>Foreign firms likely to branch out their business into manufacturing terminals or facilities</p> <p>Strategic alliances with equity stakes</p>	<p>Code Division Multiple Access (CDMA)</p> <p>Terminals or equipment industry</p> <p>Roaming services</p>
Mobile Paging Services	<p>Led by China Unicom</p> <p>Market competition will be stronger, but no great incentives for foreign companies</p>	<p>Paging equipment</p>
Value-added Telecom Services	<p>Rapid expansion of Internet-related industries such as Internet telephone services</p> <p>CHASDAQ to be established</p> <p>Active entry by foreign firms</p>	<p>Internet-phone solutions</p> <p>Internet contents</p> <p>Internet equipment industries</p>

Source: OECD (2001g).

### **Box 7. China's WTO commitments related to services**

#### *Banking services*

- Banking sector open to foreign competitors and restrictions on foreign banks eliminated within 5 years of accession.
- Geographical restrictions on local currency business by foreign banks to be phased out within 5 years.
- Foreign banks allowed to issue bank loans for car purchases.

#### *Legal services*

- Geographic and quantitative limitations will be eliminated within one year after accession, but preferences given to lawyers from Hong Kong, China.

#### *Insurance*

- 50% foreign ownership for life insurance on accession.
- 51% foreign ownership for non-life insurance on accession and wholly foreign-owned subsidiaries in 2 years after accession.
- reinsurance will be completely open upon accession.
- Upon accession, licenses will be issued with no economic needs test or quantitative limits on licenses.
- Insurance brokers: upon accession up to 50% equity, majority control within 3 years and all restrictions will be removed within 5 years.
- Within three years after China's accession, there will be no geographic restrictions.

#### *Distribution services (including commission agent service, wholesaling, retailing, and franchising)*

- Within 3 years after accession, no restrictions on foreign distribution service suppliers, except for chemical fertilizers, processed oil and crude oil within five years.
- All restrictions on provision of auxiliary services to distribution, such as warehousing, advertising, technical testing and analysis, and packing, will be phased out over 3 to 4 years.
- Large retailers (at least 20 000 m<sup>2</sup> or more than 30 outlets) will no longer be limited to 50% equity participation.

#### *Tourism*

- Hotel operators will be allowed to set up wholly foreign-owned hotels within 4 years after accession, and majority ownership possible upon accession.
- Minimum annual world-wide turnover required as qualifying condition for foreign travel service suppliers in China will be reduced by 20% to USD 40 million.

#### *Audio-visual services*

- Upon accession, foreign services suppliers will be permitted to establish contractual joint ventures with Chinese partners to engage in the distribution of audio and visual products;
- Foreigners will be allowed to invest in movie theatres but with foreign share up to 49% only.

*Source:* WTO (2001).

Current restrictions on foreign banks operations and on their geographic presence in China are to be removed over a five-year period. According to official statistics, there are 190 foreign banks now operating in China, of which 158 are branches and the others representative offices with no rights to conduct banking business in China. Geographically, foreign banks have been restricted to large cities, such as Shanghai, Shenzhen, Beijing, Guangzhou and Tianjing. Total capital of foreign banks is estimated at USD 44 billion, of which bank credits account for 18.6 billion and deposits for 6.5 billion. However, all foreign banks are not equally well positioned to engage in local currency transactions in China. OECD banks with the potential to benefit from banking sector liberalisation are those with the financial ability to manage risk, train local personnel and gain local expertise in China. Securities companies and investment management companies will be allowed to have gradual access to the Chinese market, but only through minority participation with Chinese companies. The role of Hong Kong, China in providing banking and sophisticated financial services for foreign investors in China is likely to reduce gradually, following the liberalisation of China's banking and financial service sectors. Yet, major banks in Hong Kong, China are considered among those that will compete well in China after the WTO entry.

In the field of legal services, the Chinese Ministry of Justice announced in 2000 that the "*one firm, one office*" rule which allowed each foreign law firm to open only one office in China would be abolished. Foreign law firms can now open as many offices as they wish in the cities of their choice. However, preferential treatment is given to legal professionals from Hong Kong, China to be employed by mainland firms and enter partnerships with mainland firms. Starting in 2001, Hong Kong, China lawyers are allowed to write mainland legal qualification examinations and obtain credentials to practice in the mainland. In light of the potentially huge amount of investment and trade transactions that require legal services after China's WTO entry, international law firms have complained about the preferential treatment given to Hong Kong, China-based law firms. OECD firms may need to consider forming partnerships with Hong Kong, China firms in order to better capture legal business opportunities in China.

While China's WTO accession may not have an immediate impact on its shipbuilding industry, greater FDI openness, reduction of subsidies and restructuring of shipbuilding industries could lead to investment opportunities for OECD firms. There will also be increased opportunities for sale of shipbuilding components to China. China's shipbuilding industry is the third largest in the world -- accounting for about 6% of world production -- after Japan and Korea which each account for 32%. China is not yet a major exporter of vessels and builds ships mostly for domestic shippers. For special reasons, the shipbuilding industry is not specifically covered by the WTO agreement, nor is it covered by the bilateral agreements signed for China's entry to the WTO. The shipbuilding industry is typically subsidised by national governments and its products are not standard industrial exports, but rather made by order and specification of the buyer. WTO anti-dumping rules cannot be readily applied to the shipbuilding industry, because of the complexity of vessel ownership, registration and operation.

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