



CHINA

Embraces the World Market



DEPARTMENT OF FOREIGN AFFAIRS AND TRADE



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Staffed with seven professionals, the EAU also contracts a range of consultants with specific areas of expertise. It draws on a wide range of data and information sources, including Australia's diplomatic and trade missions around the world.

The Unit produces reports and briefing papers intended to assist analysts and decision makers in business, the Australian Government and the academic community.

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iii
ECONOMIC ANALYTICAL UNIT	ix
EXECUTIVE SUMMARY	xv
CHAPTER 1 WTO ENTRY AND DOING BUSINESS IN CHINA	1
China's WTO Entry: The Headlines	2
Falling Trade Barriers	2
Further Cutting Import Tariffs	2
Continuing to Reduce Non Tariff Barriers	3
Improving Foreign Direct Investment Access	5
WTO Entry's Impact on China's Trade and FDI	5
Trade Flows to Grow Strongly	5
Foreign Investment Will Surge	6
China's WTO Entry: Beyond The Headlines	7
Role of the State is Shrinking	8
A Better Legal System	9
Better Corporate Governance	11
Labour Markets More Flexible	12
Dealing with Partners	14
Taxation Issues	15
Transparency Improving Slowly	15
Other Business Environment Challenges	16
China's WTO Challenge	19
The Implementation Challenge	19
The Restructuring Challenge	20
Implications	21
References	23
Appendix	27
CHAPTER 2 ECONOMIC OVERVIEW	31
Reforms Continue	32
SOE Reform Deepening	33
Financial Sector Reform Proceeding	33
Deregulating the Private Sector	34
Macroeconomic Policy Management Improving	35
Trade, FDI and Exchange Rate Liberalisation	35
Economy Transforming	35
Private Sector Growing Rapidly	36
Manufacturing and Service Sectors Continue Growing	36
Labour Markets Continue Changing	37

Economy Strong, Global Integration Increasing	37
Macroeconomic Fundamentals Sound	37
Trade and International Exposure Increasing	39
Life In China Improves	41
Serious Challenges Remain	43
Financial System Reform	44
SOE Reform Challenges	45
Social Security System Reform	45
Future Macro Reform Challenges	46
Political Developments	46
China's Economic Outlook	47
Impacts of WTO Accession	47
China's Growth Outlook	48
Implications	50
References	51
Appendix	55
CHAPTER 3 THE AUSTRALIA-CHINA COMMERCIAL RELATIONSHIP	59
Commercial Relations Booming	60
Australia's Exports to China	62
Minerals and Energy	64
Rural Exports	65
Manufactured Exports	67
Services	68
Australia's Investment in China	69
China's Exports to Australia	71
Manufactured Goods	72
Primary Commodities	73
Services	74
China's Investment in Australia	75
Summary and Prospects	77
References	79
CHAPTER 4 OPPORTUNITIES IN AGRICULTURE AND AGRIBUSINESS	81
Major Agricultural Trends	82
Agricultural Restructuring Continues	82
Agricultural Productivity Remains Low	85
Trade and Investment Increasing	85
Agricultural Reforms and Challenges	87
Agricultural Price, Procurement and Land Use Reforms	88
Land Tenure Reform	88
Tax and Fees Reform	88
Meeting Infrastructure, Marketing and Finance Needs	90

Impact of WTO Entry on Agriculture and Agribusiness	91
China's WTO Commitments on Agriculture and Agribusiness	91
WTO Impacts on Chinese Agriculture and Agribusiness	92
Australian Trade Opportunities	93
Wool and Cotton	94
Crops	95
Meat and Seafood Products	97
Dairy Products	97
Higher Value Foods and Beverages	99
Other Related Exports	100
Australian Investment Opportunities	102
Implications	104
References	105
Appendix	108
CHAPTER 5	OPPORTUNITIES IN MINERALS AND ENERGY
	113
Overview Of Minerals And Energy In China	114
State Still Dominates Sector	115
High Trade Exposure, Foreign Investment Less Prominent	115
Recent Mineral And Energy Reforms	117
WTO Entry Impacts on Minerals and Energy	119
Modelled Impacts of WTO Entry	119
Australian Resource Trade Opportunities	120
Metal Ores	121
Coal	122
Processed Metals	125
Oil and Gas	126
Mining and Processing Equipment and Services	128
Australian Resource Investment Opportunities	129
Implications	131
References	133
Appendix	136
CHAPTER 6	OPPORTUNITIES IN MANUFACTURING AND INFRASTRUCTURE
	143
Manufacturing	144
Overview of Chinese Manufacturing	144
Structure of Chinese Manufacturing	144
Manufacturing Internationally Integrated	146
Challenges Being Addressed	148
WTO Entry Impacts on Manufacturing	149
Australian Business Opportunities in Manufacturing	151
Australian Manufacturing Trade Opportunities	152
Australian Investment Opportunities	152

Infrastructure	156
Overview of Infrastructure	156
Growing Foreign Trade and Investment Exposure	156
Infrastructure Investment and Reform Priorities	157
WTO Entry Impacts on Infrastructure	160
Australian Business Opportunities in Infrastructure	162
Implications	165
References	166
Appendix	169
CHAPTER 7	OPPORTUNITIES IN SERVICES
	173
Overview Of The Chinese Services Sector	175
Structure and Recent Performance	175
Exposure to Foreign Trade and Investment	176
Impact of WTO Entry on Chinese Services	177
Australian Business Opportunities By Sector	178
Financial Services	178
Education and Training	184
Tourism	189
Information Communications and Technology	191
Environment	194
Professional Services	196
Distribution and Logistics Services	198
Implications	199
References	200
Appendix	204
CHAPTER 8	IMPLICATIONS FOR BUSINESS AND GOVERNMENT
	211
China, Reforms and the WTO	211
Implications for Business	211
Implications for Government	212
Commercial Implications	212
Development Assistance Implications	212
Prospects	215
INFORMATION FOR BUSINESS	217
ALSO BY THE ECONOMIC ANALYTICAL UNIT	219

EXECUTIVE SUMMARY

Entering the WTO marks an important further step in China's integration with the world economy, although WTO accession represents a continuation of its successful 25 year reform journey, rather than a major turning point. Most visibly, China committed to further cutting trade barriers and significantly improving access for foreign direct investors, particularly in services, providing many new opportunities for Australian businesses.

However, beyond the headlines, China also committed to a raft of other institutional and economic reforms that will generate broader and deeper change than just freer trade and foreign investment. Such structural measures should further strengthen ongoing legal and bureaucratic change and reinforce reforms in corporate governance, financial markets, distribution, transport and telecommunications. In the long term, these may prove even more important for China's economic development and the expansion of its commercial relationship with Australia. Not only will these measures assist China maintain high growth rates and move further towards becoming a modern and more predictable market oriented economy, they also will contribute to further gradual improvement in China's still challenging business environment. However, this will not happen rapidly. Authorities accept that accomplishing its WTO and other reform programs involve overcoming significant challenges.

DOING BUSINESS AFTER WTO ENTRY

China's ambitious and far-reaching WTO entry package commits the Government to adopting a range of trade and investment creating measures that will impact gradually upon the challenging business environment. While WTO entry will not immediately create a radically easier setting for Australian businesses operating in China, it will build on the reforms since 1978, reinforcing progress towards a market oriented economy and further dismantling inefficient state industries and reducing state intervention. For example, a major legal review introduced as part of WTO entry will help improve Chinese commercial statutes, boosting transparency and predictability. The Government also is using WTO entry requirements to motivate essential bureaucratic reforms, eventually reducing the bureaucracy's discretionary role in the economy and hence increasing certainty for foreign and local businesses.

A more market oriented Chinese economy will demand more high quality Australian goods, services, technology and investment in order to compete better in world markets and meet rising consumer demand. Further, by amplifying benefits from domestic reforms, WTO entry should help sustain strong long term growth, generating popular support for further reform and boosting incomes and demand, including for imports.

ECONOMIC OVERVIEW

To prepare for WTO entry and avoid an Asian-style crisis, Chinese authorities continue to reform the economy, including restructuring state owned enterprises and banks, dealing with non-performing loans and further deregulating the private sector. As a result of reforms, the economy's structure continues to change rapidly, with the private sector increasingly displacing the state owned and collective sectors and manufacturing and services expanding at the expense of agriculture. Consequently, China remains the world's fastest growing large economy, achieving impressive gains in poverty reduction and boosting local markets' size and sophistication. Looking ahead, China's real gross domestic product should grow by about 7 per cent per year for the next decade, barring major social or political disruption or fiscal crisis.

Nevertheless, the economy faces several serious inter-related challenges which the Chinese Government recognises it must tackle to maintain strong growth. First, failure to advance further banking system reform and deal with the current burden of non performing loans could increase seriously the Government's fiscal burden and undermine growth prospects. Second, the authorities must continue to reform state owned enterprises to improve their efficiency, allow the rapidly expanding private sector room to grow and improve the quality of bank loans. Finally, the Government needs to address funding shortfalls for massive social security and retirement benefit liabilities or it will undermine long term fiscal sustainability and slow essential state enterprise reforms.

THE AUSTRALIA-CHINA COMMERCIAL RELATIONSHIP

Strong trade complementarity drives the large and rapidly expanding commercial relationship between Australia and China. China is currently Australia's third largest merchandise trading partner, up from only ninth in 1990. Australia exports large quantities of primary commodities to China, particularly metal ores and wool, and increasingly education and tourism services. China mainly exports labour intensive manufactures to Australia, but their value added and sophistication is increasing.

Australia has not been a prominent investor in the sector attracting most foreign direct investment to China, labour intensive manufacturing. Hence, while hundreds of Australian firms invest in China, most are small and their total investment is between \$2 billion and \$4 billion. About one third of these firms are in manufacturing, one third in property and business services and the remainder in a diverse range of other sectors. By contrast, Australia is a major destination for Chinese foreign direct investment, which totals just over \$3 billion. Most of this investment is in the resources sector, particularly iron ore; the remainder is spread across many smaller Chinese businesses operating in manufacturing and a range of service sectors.

OPPORTUNITIES IN AGRICULTURE AND AGRIBUSINESS

Market opening under WTO and Chinese agricultural reforms should ensure an expanding market for Australian agricultural products in China. In 2001, Australia supplied almost \$2.4 billion worth of agricultural commodities to China, mostly wool, barley and canola seeds, up from around

\$1.6 billion in 1997. WTO related tariff cuts and new agricultural tariff rate quotas should increase export opportunities for Australian farmers. Also, reduced state intervention, competition and environmental pressures are encouraging Chinese farmers to focus more on their competitive strengths in labour intensive agriculture, expanding markets for Australian land intensive crops and some livestock products. Australia also should access increasing opportunities to supply agricultural equipment, services and technologies to Chinese farmers seeking to improve productivity.

Further relaxation of restrictions on foreign investment post WTO entry should make it easier for Australian firms to invest in Chinese agricultural and agribusiness sectors. However, due to land purchase restrictions and an uncertain business and policy environment, these sectors will remain challenging for investors; medium term investment opportunities are more likely to open up in food processing, where many overseas investors already are present.

OPPORTUNITIES IN MINERALS AND ENERGY

Over the next decade, rapid industrial and infrastructure growth along with mineral processing and mining industry reforms should underpin strong Chinese demand for Australian minerals and energy exports. China is an increasingly important global minerals and energy trader, importing \$4.4 billion worth of resources from Australia in 2001, representing more than half of total Australian exports to China. This makes China our third largest customer for resource commodities after Japan and the Republic of Korea.

While mineral and energy tariffs have been low for several years, WTO entry gradually will promote more transparent and commercially based trading arrangements, potentially increasing the certainty, profitability and scope of this trade. Also, as uncompetitive Chinese mines exit the industry and processing demand expands, Chinese markets for Australian iron and copper ore, alumina and liquefied natural gas, among others, should continue to grow rapidly. Further, as ongoing mining regime reforms encourage more foreign investment, increased activity and competition should generate increased joint venture and local mine demand for imported mining equipment, inputs, services and technology.

Restrictions on foreign participation in mining and an uncertain policy environment mean foreign direct investment in mining is small; foreign investors participate more in minerals processing and oil and gas production. Due to continued policy uncertainty, foreign greenfield mining investment is unlikely to expand strongly in the short term, but foreign participation in minerals processing and oil and gas sectors should expand more rapidly. In the medium to long term, mining investment prospects look brighter, although opportunities are contingent on more encouraging policy developments.

OPPORTUNITIES IN MANUFACTURING AND INFRASTRUCTURE

China's large, increasingly open and rapidly expanding manufacturing sector will be a major beneficiary of WTO entry; its enormous, growing but sometimes inefficient infrastructure sector also should benefit. WTO entry will open new markets for Chinese exports of textiles and apparel to Europe and

the United States. China also will further cut manufactured tariffs, boosting import competition, improving local industry productivity and product quality, and generating higher consumer incomes and domestic demand. This will lead to new opportunities for Australian manufactured input suppliers and finished goods exporters.

Rapid economic growth is straining China's infrastructure network, resulting in low quality services and supply shortfalls in some industries, and creating opportunities for foreign suppliers. WTO entry will ease restrictions on foreign participation in several major infrastructure sectors including airports and ports. Combined with ongoing regulatory reforms and strong economic growth, these developments should increase opportunities for Australian infrastructure equipment and services providers and investors.

OPPORTUNITIES IN SERVICES

China is an increasingly active international services trader and, with WTO entry, committed to further liberalise services trade. While tight restrictions have to date limited foreign services investment, WTO entry commits China to gradually open most service sectors including financial, education, tourism, telecommunications, environment and professional services, creating many new opportunities for Australian service suppliers. China's services sector now accounts for about one third of economic activity. Throughout the economy, rising local and international competitive pressures will increase Chinese businesses' demand for foreign services expertise and more affluent Chinese consumers also increasingly will demand international tourism and high quality overseas education.

IMPLICATIONS FOR BUSINESS AND GOVERNMENT

WTO accession should further enhance the dynamic Australia-China commercial relationship, ensuring strong and sustainable long term trade and investment growth. Not only will China reduce trade and investment barriers but WTO entry should reinforce China's massive on-going reform program, helping build a sounder legal and regulatory system and delivering a progressively fairer and more predictable business environment for Australian and local businesses. By increasing the Chinese economy's competitiveness, WTO entry also will boost incomes and local business and consumer demand for goods, services, capital and technology, including from Australia.

Nevertheless, China faces a massive task in implementing WTO commitments, completing other essential reforms in state enterprises, pensions, banking, agriculture and infrastructure and in strengthening key economic policy making and regulatory institutions. Australia and other donors have contributed significantly to China's reform process through a wide range of technical, training and other assistance. Drawing on Australia's strong institutions and reform experience, Australia usefully could continue to direct a significant part of its development assistance to addressing these challenges. Such assistance would help China meet the core policy and institutional strengthening issues it faces in the next decade, helping it become a prosperous, modern, more market oriented economy, further reducing poverty and enhancing opportunities for bilateral trade and investment flows.

WTO ENTRY AND DOING BUSINESS IN CHINA

KEY POINTS

- China's entry into the World Trade Organization, WTO, marks an important milestone in its integration with the global economy.
- Most visibly, China committed to further open its trade and investment regimes, reinforcing liberalisation undertaken over the past 25 years.
- Beyond the headlines, China's ambitious WTO accession agreement also will reinforce broader financial, state sector, corporate and legal reforms begun in the late 1990s. This should accelerate China's quarter-century long 'move to the market' and strengthen the business environment for both local and foreign firms.
- Australian businesses should expect a steady rather than a dramatic improvement in China's challenging business environment, particularly given the obstacles authorities face. Thorough market research and due diligence on potential associates remain important.

In December 2001, the world's sixth largest trading nation, the People's Republic of China, became a full member of the WTO, completing a 15 year negotiation process.¹ China's entry is important for China and for the WTO. As a large, dynamic and increasingly important trader, China's membership of the WTO expands and strengthens the coverage of the multilateral rules based trading system and adds another major player to the negotiating process. For China, WTO entry will continue its process of external liberalisation, further boosting international trade and investment and deepening its global integration.

However, liberalising trade and investment are only the most visible part of the changes WTO entry will bring. Beyond the headlines, China also agreed to implement a set of measures that will reinforce corporate, legal and financial system reforms already underway. These deeper structural reforms already are gradually changing the business environment for traders and foreign investors and WTO entry should strengthen this process over the next decade. Authorities accept that accomplishing ambitious WTO and other reform programmes will bring significant challenges. However, their impressive reform record since 1978 suggests they will work hard to address these issues.

CHINA'S WTO ENTRY: THE HEADLINES

The most visible and widely reported aspects of WTO related reforms are China's commitments to reduce trade barriers and improve foreign investment access over the next five years.²

FALLING TRADE BARRIERS

Further Cutting Import Tariffs

China's commitments to further tariff reductions continue a longer term trend and, when implemented, will result in a relatively open economy by world standards (Figure 1.1). China will reduce average tariffs on all products from 15.3 per cent in 2001 to about 10 per cent by 2010; within this, industrial tariffs will fall to 9 per cent and agricultural tariffs to 15.7 per cent.³ China also committed to bind all its import tariffs at current or reduced levels, limiting future tariff rate rises.

¹ This report updates a major report the East Asia Analytical Unit, now Economic Analytical Unit, released in 1997 on China's economic reforms, *China Embraces the Market; Achievements, Challenges and Opportunities*. This new report focuses on post 1997 reforms, including those related to WTO entry.

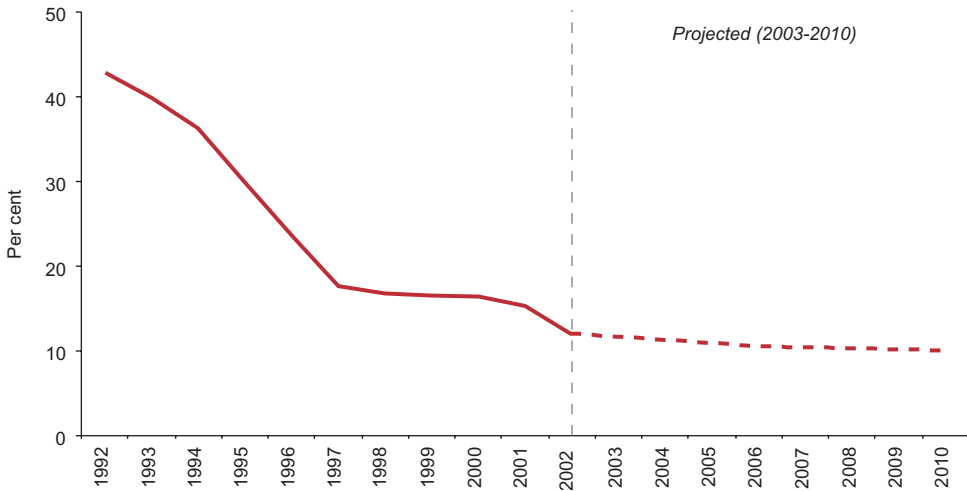
² This discussion is drawn from the working party report on China's accession to the WTO and its major points are summarised in Appendix Table 1A.1 (World Trade Organization, 2001a).

³ Specific tariff rate reductions are discussed in Chapter 4 – *Agriculture and Agribusiness*, Chapter 5 – *Minerals and Energy* and Chapter 6 – *Manufacturing and Infrastructure*.

Figure 1.1

Tariffs Continue Falling Under WTO

China's Average Import Tariff, Actual and Projections, Per cent, 1992-2010



Note: Where data set not complete prior to 2001, tariffs assumed to fall equally between years.

Sources: Adhikari et al., 2002; World Trade Organization, 2001a; Department of Foreign Affairs and Trade, 2002; Economic Analytical Unit calculations.

Continuing to Reduce Non Tariff Barriers

Over the next five years, China also committed to reduce a range of non tariff barriers on imports, including on trade in services.⁴ It will replace import licensing and quotas on a range of agricultural products with a system of tariff-rate quotas, TRQs.⁵ Licences and quotas on industrial products progressively will be eliminated, with a few exceptions.⁶ China undertook to make these new arrangements more transparent than previous quota and licensing systems. China also committed to replacing some existing TRQs with tariffs only.

⁴ These commitments are summarised in Appendix Table 1A.1.

⁵ TRQs provide guaranteed access for a designated volume of imports at a relatively low tariff; above the quota, imports attract a much higher tariff. For example, in 2002, China guaranteed to allow access for 7.9 million tonnes of imported wheat at a low tariff of 1 per cent; any imports above this quota will attract a duty of 70 per cent. However, the existence of a tariff rate quota merely guarantees access, it does not compel purchase. For example, if world wheat prices are higher than Chinese wheat prices and Chinese harvest volumes are adequate, local wheat users are unlikely to demand imported wheat, regardless of what tariff rate quota is in place.

⁶ These exceptions include urea and diammonium phosphate.

China agreed to bring its export licensing and quota regimes into line with WTO requirements. China also agreed to immediately eliminate all export subsidies and limit the level of domestic agricultural support to 8.5 per cent of the value of agricultural production.⁷ Further, China agreed to extend importing and exporting rights to all domestic and foreign firms by the start of 2005, apart from retaining some restrictions on the few commodities reserved for state trading.⁸ China also committed to apply uniform customs fees and charges across the country and to bring its anti-dumping, subsidies, countervailing duties, technical barriers to trade and sanitary and phytosanitary regimes in line with WTO regulations. Finally, China agreed to undergo an annual transitional review of its WTO implementation, to monitor its compliance with its WTO commitments.

SERVICES TRADE COMMITMENTS

Also as part of WTO accession, the Government committed to a wide range of services trade reforms, including:

- boosting transparency in services trade by publishing a list of all organisations responsible for authorising, approving or regulating services
- separating service sector regulatory authorities from service suppliers
- ensuring licensing procedures and conditions do not restrict services imports
- publishing licensing procedures and conditions prior to their becoming effective
- allowing applicants to request licences without requiring invitations from relevant authorities
- permitting foreign service suppliers to form partnerships with any legally established Chinese entity they choose, including companies outside the joint venture's sector of business
- levying processing fees commensurate with administrative costs
- promptly processing applications and informing successful and unsuccessful applicants in writing.

Source: World Trade Organization, 2001a.

⁷ While estimates of the current extent of Chinese agricultural support vary, most suggest China's current agricultural subsidies are equivalent to around 2 per cent of the value of agricultural production. Thus, China has scope to increase its agricultural support from current levels.

⁸ These reserved commodities include wheat, corn, rice, vegetable oils, sugar, cotton and cotton fabrics, tobaccos, cigars, cigarettes, oil and petroleum products, various fertilisers, tea, soya beans, coal, various metal ores, silk and silver (World Trade Organization, 2001b).

IMPROVING FOREIGN DIRECT INVESTMENT ACCESS

Under its WTO accession agreement, the Government also will reduce barriers to foreign direct investment, FDI, continuing a process begun in the early 1980s. For example, China agreed to continue reducing ownership ceilings on foreign investment in sectors already allowing foreign participation, including automobiles, banking, insurance and infrastructure. Authorities also gradually will open many previously closed sectors like telecommunications, securities and distribution. (For specific changes to foreign investment caps, see Chapter 4 – *Agriculture and Agribusiness*, Chapter 5 – *Minerals and Energy*, Chapter 6 – *Manufacturing and Infrastructure* and Chapter 7 – *Services*.)

In addition to reducing FDI restrictions, China also agreed to reduce or remove other key controls on foreign investment. China will eliminate foreign exchange balancing, trade balancing, local content and export performance requirements previously applied to many foreign firms investing in China.⁹ Foreign investors will not have to undertake research or transfer technology to local firms. Furthermore, authorities no longer can prohibit foreign firms entering a local market on the grounds they may affect domestic suppliers. These important changes will further limit the influence of the Chinese authorities over the operation of foreign businesses in China, potentially stimulating greater flows of investment.

WTO ENTRY'S IMPACT ON CHINA'S TRADE AND FDI

TRADE FLOWS TO GROW STRONGLY

Falling tariffs, fewer import restrictions and improved quota access should boost opportunities for trade with China. Economic Analytical Unit modelling commissioned for this report forecasts WTO entry will boost China's import growth from 11 per cent to 12.3 per cent per annum up to 2010 (Centre of Policy Studies, 2002).¹⁰ As a result, by 2010, China's imports, in constant 2000 prices, will be US\$85 billion higher than without WTO entry (Figure 1.2).¹¹ Under WTO, China's exports to the world should grow markedly faster as accession also opens up new global markets for Chinese exporters.¹²

⁹ However, the motor vehicle sector will operate under a different transitional regime, with the Government maintaining controls on foreign entrants, particularly in the compact car segment.

¹⁰ Chapter 2's Appendix provides more details of the modelling undertaken in this study.

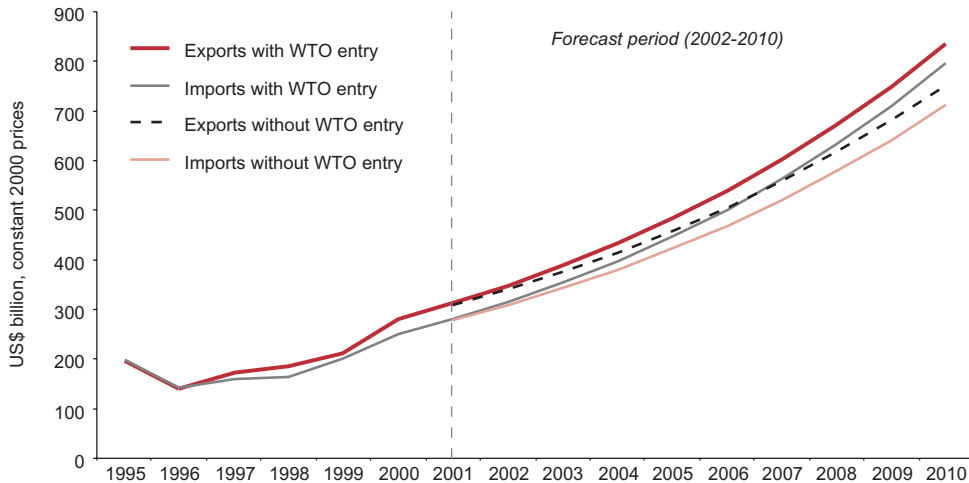
¹¹ Lower tariffs also will reduce the incentives for smuggling, building on the success of Chinese authorities' recent efforts to address this issue.

¹² Over time, WTO members must progressively reduce trade 'safeguards' applied to protect their domestic industries from Chinese competition. This is particularly important in areas like apparel and textiles, where China is very competitive but heavily restrained from competing on an equal footing in global markets. Prior to China's WTO entry, Australia and Japan did not apply quotas or other systematic restrictions to China's clothing and textile exports, but many other developed economies did.

Figure 1.2

WTO Entry to Boost Trade Growth

Forecast WTO Impact on China's Exports and Imports, US\$ billion, Constant 2000 prices, 1995-2010



Sources: World Bank, 2002; Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

FOREIGN INVESTMENT WILL SURGE

FDI also is expected to surge into newly opened sectors, especially services. In 2001 and the early part of 2002, contracted and realised FDI inflows grew strongly and current trends indicate 2002 FDI inflows could exceed US\$50 billion for the first time.¹³ Economic Analytical Unit commissioned modelling forecasts these inflows will continue to expand strongly in coming years, potentially reaching US\$67 billion per annum by 2005 and US\$84 billion by 2007, measured in constant 2000 prices (Figure 1.3).¹⁴

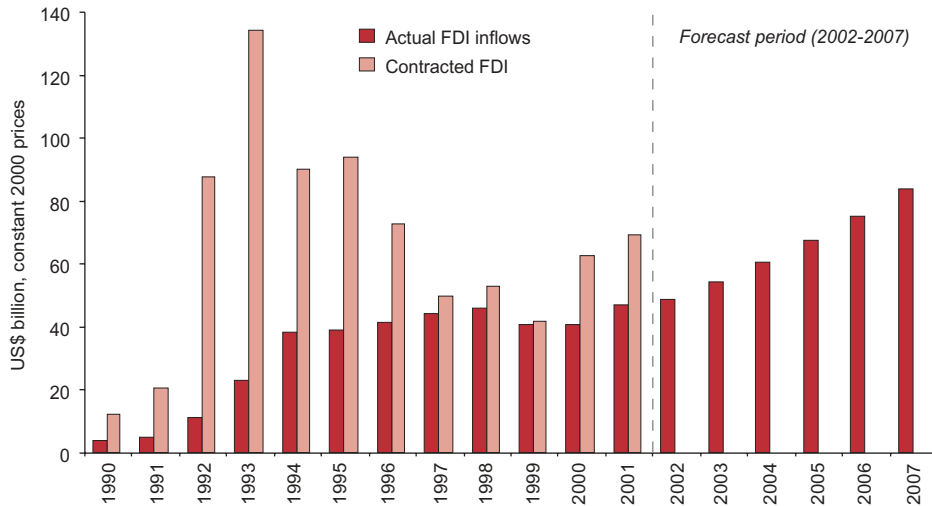
¹³ In the first 9 months of 2002, FDI inflows totalled almost US\$40 billion, representing an increase of more than 20 per cent over the same period of 2001 (CEIC, 2002).

¹⁴ However, over coming years, the planned unification of foreign and domestic business taxes and reductions in other incentives granted to foreign businesses may provide a disincentive for domestic investors to disguise their investment as FDI inflows. Current FDI figures still include a substantial element of 'roundtripping', where domestic investment is unofficially routed via offshore entities to take advantage of incentives granted to foreign companies (East Asia Analytical Unit, 1997). However, potentially offsetting this, the Chinese authorities recently canvassed the option of selling majority stakes in major SOEs to foreign interests. This may lead to much greater opportunities for cross-border mergers and acquisitions and significantly boost FDI inflows and industrial restructuring.

Figure 1.3

WTO Entry to Boost FDI Inflows

Forecast WTO Impact on China's FDI Inflows, US\$ billion, Constant 2000 prices, 1990-2007



Note: 2002-2007 forecast FDI figures are derived by assuming FDI will account for 10 per cent of total fixed investment over the entire forecast horizon. Over the 1995-2001 period, this ratio averaged 13 per cent.

Sources: CEIC, 2002; Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

While such results should be viewed with caution given the uncertainties of policy and econometric modelling, they nevertheless point to an encouraging outlook for FDI in China. Other prominent analysts forecast reasonably similar inflow figures; by 2006, the Economist Intelligence Unit is projecting China will receive US\$72 billion in annual FDI (Economist Intelligence Unit, 2002a).

CHINA'S WTO ENTRY: BEYOND THE HEADLINES

Despite the impressive scope of these commitments and their likely significant impact on trade and FDI flows, the importance of China's WTO entry goes well beyond liberalising trade and foreign investment. As part of its accession package, China committed to many other measures that directly enhance its broader economic reform program, including state sector, bureaucratic, economic governance and legal reforms. Furthermore, anticipating WTO entry impacts, authorities are pressing ahead with a range of other reforms, including improving labour market functions and corporate governance and addressing other obstacles to business.

Hence, some prominent commentators regard China's commitments as a 'WTO-plus' package that goes much further than any previous entrant's commitments (Lardy, 2002). Implementing these important structural measures eventually should remove many of the remaining distortions imposed by China's formerly planned economy, limiting authorities' residual controls over business (Drysdale, 2002). This

process should deliver a better governed economy, boost the transparency and certainty of the business environment and level the playing field for private and foreign businesses alike, thus continuing China's quarter-century long 'move to the market'. Nevertheless, this process will take considerable time and effort to implement fully. Australian businesses operating in China still need to prepare thoroughly, extensively researching markets and potential associates.

Role of the State is Shrinking

The state sector in China accounts for about one-third of urban industrial output but much higher shares of bank lending and fixed investment. (See Chapter 2 – *Economic Overview*.) Also, the Chinese bureaucracy substantially intervenes in private business establishment and operation.¹⁵

Under WTO entry, authorities committed to eliminate dual trade pricing and most other price controls.¹⁶ China's state owned enterprises, SOEs, no longer can export subsidised products and are required to trade on commercial terms. Also, China committed progressively to widen trading rights to private and foreign businesses by 2005. These commitments will further contribute to the decline of the state's role in the economy.

These initiatives complement other ongoing reforms that reduce the role of the state. For example, privatisation of small and medium sized SOEs continues apace, although the state still controls the majority of enterprises in 'strategic' sectors like telecommunications, finance, steel and utilities. However, WTO entry also will open these sectors to new entrants. As SOEs increasingly must operate on a commercial basis, have their funding provided on more commercial terms and face increased domestic and international competition, they will be forced to base production and investment decisions on sounder business models, reducing the scope for sustained anti-competitive behaviour.

Authorities also are making progress in reducing bureaucratic burdens; WTO entry will likely further increase the transparency and ease of dealing with government economic agencies. Authorities now realise unnecessary red tape discourages new local and foreign investment and in recent years have begun to rationalise bureaucratic processes for business (China OnLine, 2002; Economist Intelligence Unit, 2001; American Chamber of Commerce, 2002b). The Government has used WTO entry to educate government officials about their new role in a more market oriented economy (Liao, 2002; Shen, 2002; Yao, 2002). Hence, while bureaucratic requirements remain high, WTO entry is encouraging authorities to implement more market based and indirect controls and recent trends are encouraging (Warren, 2002).

¹⁵ Analysts suggest state officials remain a dead weight on the economy through unnecessary economic planning and control (Economist Intelligence Unit, 2001). Business surveys still find bureaucratic difficulties remain a key challenge for foreign businesses; prior bureaucratic approval is required for anything of significance and for much that is routine (American Chamber of Commerce, 2001a, 2002a). Specific challenges highlighted include foreign exchange remittance controls, burdensome product registration and certification procedures, price and profit controls, inconsistent interpretation of laws and regulations and considerable paperwork and liaison requirements (US Department of State, 2002; World Trade Organization, 2001a).

¹⁶ Dual trade pricing is where the Chinese authorities set a lower price for the domestic market and a higher price for export markets, thus biasing firm behaviour in favour of exporting.

A Better Legal System

Generally, WTO entry is assisting the Chinese authorities in introducing and implementing a more coherent set of commercial laws, critical in building a more stable and transparent framework for social and economic development (Suo, 2002). Authorities also are using the opportunity of WTO entry to improve administrative regulation, particularly by limiting government influence on business activities; a trend to reduce governmental interference increasingly drives drafting of new commercial laws and regulations (Zhao, 2002). These are important developments, although the legal system can still be problematic for some foreign and local business people.

CHINA'S LEGAL AND ARBITRATION SYSTEMS

The Chinese legal system is still developing and differs substantially from Australian practices. Chinese courts do not use the Anglo-American common law tradition of following precedent and requiring systematic publication of cases. Instead, like the European legal system, Chinese law is based on a body of codes. Judges decide issues on a case by case basis and it is not always clear which rules will apply to a case. Furthermore, Chinese courts have little power to compel attendance at a trial, making enforcement very difficult.

Responsible Ministries determine, interpret and supervise relevant regulations. Judicial and legal training of participants is uneven. China lacks sufficient experienced attorneys who comprehensively understand Western practices and are familiar with domestic nuances. Many court judgements are difficult to enforce due to a still-developing property rights system and lack of enforcement mechanisms; in most cases, foreign and domestic businesses cannot rely on the commercial courts for prompt and predictable resolution of disputes or contract enforcement.

As a result of these and other uncertainties, resolving commercial disputes through the courts is generally not favoured by foreign businesses in China. Instead, most foreign investors prefer to submit their commercial disputes to arbitration, which is improving and is used more widely. The China International Economic Trade Arbitration Commission, CIETAC, is the primary body used for Sino-foreign arbitrations in China and has developed a reasonable reputation for impartiality, transparency and integrity; foreign business reports increasing success in arbitration cases.¹⁷ However, whether resolving a dispute through courts or through arbitration, enforcing these awards remains very challenging.

Sources: American Chamber of Commerce, 2002a; Hobgood-Brown, 2002; Minter Ellison, 2002; *Far Eastern Economic Review*, www.feer.com, 9 May 2002; *South China Morning Post*, www.scmp.com, 24 February 2001; O'Shea, 2002.

¹⁷ These arbitration bodies, also including the Shanghai International Arbitration Commission, typically are staffed by young Chinese legal professionals who have trained or worked overseas (O'Shea, 2002).

Under WTO entry, China committed to allow independent judicial review of contested trade decisions, release draft laws for comment, publish all trade-related laws in one or more of the WTO's working languages and create points of trade enquiry.¹⁸ These measures promise to boost trade transparency gradually and give urgency to ongoing legal reforms elsewhere.

Apart from these commitments, China is undertaking a wide ranging program of legal and administrative reform across all provinces and local government areas, aimed at harmonising its laws, regulations and administrative guidelines with WTO requirements (Lan, 2002; Peng, 2002; Yao, 2002; Suo, 2002). Authorities are amending, abolishing or introducing hundreds of central and provincial laws and regulations; many more local regulations require alteration.¹⁹ Importantly, China agreed to bring its intellectual property rights regime into line with international practice. Dynamic southern and eastern provincial governments appear more advanced than others in changing necessary laws, recognising benefits for their traders and in attracting FDI.

Apart from wide ranging legislative reform and modernisation, the authorities also are addressing training needs. Commercial legal training is increasing rapidly and taking on new importance; judges and promising trainees are sent for training abroad (Brown, 2002; Zhu, 2002). The Government is enforcing quotas of tertiary educated judges at each level of the court system; previously, judges were not required to have qualifications (Zhu, 2002).²⁰ The authorities also are establishing special courts to handle complex cases such as international commercial and intellectual property disputes (Zhu, 2002). As well, authorities are considering other measures to increase transparency, including a draft bill allowing the public to witness commercial legal cases (Economic Analytical Unit, 2002).

However, despite the encouraging progress, Australian businesses need to be aware of the remaining legal challenges and should gain a good understanding of China's legal system prior to entering the Chinese market.

¹⁸ Points of enquiry are places where businesses can obtain all information relating to the laws, regulations and other measures pertaining to or affecting trade in goods, services, trade related intellectual protection matters, or the control of foreign exchange, as well as the published texts (World Trade Organization, 2001a).

¹⁹ In 2000, Chinese negotiators presented the WTO working party with a list of 177 domestic laws dealing with customs administration, foreign investment administration, intellectual property and services trade that required revision to make them consistent with China's new international obligations (Lardy, 2002). Chinese Premier Zhu Rongji told a recent trade conference that more than 2 200 laws and regulations already had been reviewed, amended or abolished (Economist Intelligence Unit, 2002b). Even in the lead up to entry, much legal reform occurred. Since 1995, China enacted more laws relating to economics and business than in the 20 years prior (Stapleton, 2002).

²⁰ These new quotas require that in the Lower Court, at least 30 per cent of judges must hold a university degree; in the Middle Courts, at least 60 per cent; and at the Highest Courts, at least 90 per cent (Zhu, 2002).

IMPROVING INTELLECTUAL PROPERTY PROTECTION

Unauthorised duplication of intellectual property, IP, remains a major challenge for many foreign businesses. Examples include local partners and employees copying joint ventures' intellectual property and establishing new operations in direct competition with former partners or employers, or competitors buying a product and copying it.

Under the WTO, Chinese authorities committed to better protect IP. In 2000, 2001 and 2002, they strengthened the IP legal and enforcement framework, amended key patent, copyright and trademark laws and issued interpretations and regulations making its intellectual property rights regime comply with WTO standards. China also now will allow local administrations to handle infringement complaints on foreign-held copyrights; previously, foreign business was required to submit complaints at the state level.

International legal firms now report improving judicial processes and official attitudes towards protecting IP, and Chinese firms are becoming increasingly aware of IP violations.²¹ Steps also have been taken to make criminal prosecutions of IP violations easier to pursue. However, relatively low penalties for violators undermine new laws' credibility and enforcement often is difficult to achieve. To guard against IP violations, some successful foreign firms offer attractive working conditions and remuneration for employees, implement strong internal security, limit internal information sharing, separate different business arms and undertake cautious marketing strategies, including targeting sales outside China. New entrants immediately should register trademarks and patents with the Chinese authorities.

Sources: American Chamber of Commerce, 2002b; Brown, 2002; Economist Intelligence Unit, 2002k; Hay, 2002; Mahon, 2002; Minter Ellison, 2002; Hobgood-Brown, 2002; US Trade Representative, 2002.

Better Corporate Governance

While corporate governance standards in the state owned and growing private enterprise sectors remain relatively weak, the Asian financial crisis, WTO entry and recent international corporate governance problems have increased authorities' commitment to strengthening corporate governance (Economic Analytical Unit, 2002).²² Authorities are strengthening listing rules and tightening securities market oversight, standardising corporate and financial institution disclosure, corporatising and listing SOEs, attempting to commercialise bank decisions and improving accounting and auditing standards (Economic Analytical Unit, 2002; Wang, 2002; Godwin, 2002; Economist Intelligence Unit, 2002i).²³

²¹ Both the courts and the central authorities are continuing a campaign to prevent intellectual property rights infringements and enforce judgements more strongly. Importantly, the authorities now emphasise the importance of intellectual property rights protection to the population through major media campaigns (US Trade Representative, 2002).

²² Chapter 7 of *Changing Corporate Asia, What Business Needs to Know* provides a more comprehensive survey of China's corporate governance environment (Economic Analytical Unit, 2002).

²³ In 1997, China also joined the International Accounting Standards Committee and authorities are sending professionals, academics and officials abroad for training, further exposing the sector to world-best accounting practices (Economist Intelligence Unit, 2002h; 2002j).

Importantly, the Government is tightening enforcement of new laws.²⁴ The Government also is attempting to increase SOE boards' independence and accountability to shareholders (Economic Analytical Unit, 2002; Godwin, 2002; Cha, 2001).²⁵

WTO entry should increase pressure to strengthen corporate governance. For example, under its accession agreement, China committed to increase access for foreign banks and other financial institutions, increasing scrutiny on Chinese companies that borrow. Accession also should level the playing field between state and non state firms, ensuring freer competition in previously protected trading, transport, distribution, retailing, heavy industry, telecommunications and utilities sectors, increasing market oversight of their operations and improving corporate governance. Finally, as Chinese firms seek to access more FDI and portfolio financing through foreign listings, their operations will face closer market scrutiny.

Despite this progress, China has many serious corporate governance issues to tackle. Most of the 1 200 publicly listed firms still are state majority owned and controlled, limiting outside scrutiny. Valuations of SOE assets can be inaccurate and balance sheets opaque (Economist Intelligence Unit, 2002i). Most company directors represent management and worker interests ahead of private and state shareholders. As yet, institutional investors are underdeveloped and the legal system offers limited protection for minority shareholders (Economic Analytical Unit, 2002; *Far Eastern Economic Review*, www.feer.com, 9 May 2002).²⁶ Unlisted firms, particularly small and medium enterprises, are not required to adopt sound accounting or corporate practices and are subject only to a mandatory annual tax audit (Wang, 2002; Warren, 2002). China still lacks key legal and enforcement provisions, including an effective bankruptcy law, independent boards and rigorously applied accounting standards (Economic Analytical Unit, 2002).²⁷

Labour Markets More Flexible

While WTO entry will have little direct influence on labour market operation, the increasing need it generates to reallocate workers from declining to growing sectors is encouraging authorities to increase the pace of labour market reforms. In the past, a myriad of labour laws and regulations reduced labour market flexibility; in particular, the *hukou* residence permit system restricted people's movement

²⁴ For example, the China Securities Regulatory Commission, CSRC, suspended trading in Guangxia Industry, a biochemical firm that overstated its profits in 1999 and 2000, delicensed Guangxia's accountants and charged individual accountants with fraud (Economist Intelligence Unit, 2002i).

²⁵ In August 2002, the CSRC released guidelines on making boards more independent; by 30 June 2003, all listed companies are expected to have one-third of the board as independent directors (China Securities Regulatory Commission, 2002).

²⁶ Indicating the scale of corporate governance challenges, an early 2002 survey by the Chinese National Audit Board found that 14 of 16 surveyed firms had 'gravely inaccurate' information in their annual reports (Economist Intelligence Unit, 2002j).

²⁷ In early 2002, the Government drafted legislation to unify the bankruptcy laws applying to state and non-state enterprises. Although the Government has not yet passed this law and a draft bankruptcy law has been stalled for many years, this new law may open the way for more merger and acquisition activity, increasing participation by foreign firms in the ownership of SOEs and boosting pressures to perform (Economist Intelligence Unit, 2002g).

between cities and rural and urban areas.²⁸ Moreover, urban labour markets remain partially segmented between 'contract', usually rural immigrant labour, and 'permanent', urban resident, workers.

However, in recent years, the Chinese Government has increased labour market flexibility, relaxing many restrictions under this system and gradually dismantling the *hukou* system, with only a few large cities still rigorously applying its provisions (Meng, 2002; American Chamber of Commerce, 2002a).²⁹ This is an important step in improving China's ability to adapt to post-WTO structural changes.

LAND AND REAL ESTATE MARKETS

In China, the state owns all land but rights to use land for commercial, industrial and residential use can be purchased for periods between 40 and 70 years. Many land transfers and dealings still are not transparently conducted, making it difficult for the foreign investor to gain secure tenure in some cases.

However, the central authorities are reforming the land tenure and transfer systems, including moving to transfer land use rights through open tenders or auctions. A secondary market in land and property assets also is developing, boosted by successful property ventures and early land sales from non-performing loan portfolios banks' asset management companies hold. Many major cities' commercial real estate markets also are recovering from the mid 1990s building boom that depressed prices; rent and vacancies are recovering strongly and new office space again is being constructed.

Sources: *Far Eastern Economic Review*, www.feer.com, 19 April 2001, 7 February 2002, 27 June 2002.

However, foreign businesses still identify many labour cost and industrial relations challenges. For example, restructuring and down-sizing SOE joint venture workforces can be difficult, work cultures can be very different and former SOE workers in joint ventures often have an entitlement mentality.³⁰ Although flexibility is improving, foreign firms sometimes must work within restrictive local government guidelines when hiring new staff.³¹ Authorities can introduce new labour laws and regulations with little or no prior warning and coordination among agencies can be poor (American Chamber of Commerce, 2002a). Pension, unemployment insurance and other mandatory wage bill imposts can

²⁸ A complex system of laws and regulations still governs labour relations; the Ministry of Labour and Social Security has primary carriage for enforcing most labour laws, although several other ministries also play a role.

²⁹ However, once rural migrants reach cities, local authorities sometimes direct them into certain sectors and industries (Meng, 2002).

³⁰ Former SOE workers in joint ventures can vigorously oppose proposals to restructure work practices and downsize bloated staffing levels.

³¹ For example, representative offices of foreign enterprises often must hire from a pool of candidates a government-approved labour services company preselects. The foreign firm must pay their Chinese employees through the services company and the services company determines how much the employee gets paid, often considerably less than the employer pays (US Department of State, 2002). This mechanism is sometimes used to equalise wages between domestically and foreign employed Chinese workers (Meng, 2002).

be quite high; some local businesses may be exempt from these costs (American Chamber of Commerce, 2002a).³² Foreign employers also may have to provide subsidised housing or medical care (US Department of State, 2002).

Dealing with Partners

In China's early years of liberalisation, foreign firms were required to joint venture with local firms; government officials typically selected these firms. However, since 1986, authorities permitted wholly owned foreign enterprises, WOFEs, in certain sectors and foreign firms increasingly are using this business structure. In 2001, almost 60 per cent of newly-signed foreign investment agreements were conducted through WOFEs, compared to about 30 per cent in 1995 (CEIC, 2002). However, joint ventures still may be required in some sectors due to remaining government restrictions on foreign investors' shares.

COMMON PARTNERING CHALLENGES

Problems with local partners is one of the most frequent issues facing foreign joint ventures. Prior to WTO entry, foreign businesses sometimes had to enter joint ventures with partners local authorities selected, often causing partnership difficulties. Other partnering challenges foreign businesses consistently nominate include:

- fundamentally divergent business objectives and time-frames
- markedly different business attitudes and operating methods
- cultural and language barriers
- poor communication between layers of management and partner representatives
- embezzlement, fraudulent behaviour, hidden dealings and incorrect valuations
- unauthorised duplication of intellectual property.

Joint venture partners often can avoid many of these difficulties through better research and preparation before entering the joint venture. Businesses facing these challenges often admit they are due more to inadequate preparation and a poor business model than any particular 'China problem'. Nevertheless, the corporate governance environment is still evolving, requiring intending business entrants to have realistic expectations of likely challenges.

Sources: US Department of State 2002; American Chamber of Commerce, 2002b; Economic Analytical Unit interviews with business.

³² In Shanghai, for example, these imposts can add up to 50 per cent to the average wage bill (Wu, 2002).

WTO entry should assist in improving partner relations through strengthening corporate laws and reducing the scope for arbitrary government or corporate actions. Nevertheless, successful foreign joint venture companies emphasise the need for care and extensive due diligence in choosing a partner; poor research and preparation has undermined many foreign entrants, including several major and experienced international players. Experienced business facilitation organisations, including Austrade and a large number of private consultants, play a key role in providing intending entrants with sound intelligence on potential partners.

Taxation Issues

While tax policy and administration generally is improving, foreign businesses still face challenges. In recent years, authorities have released draft tax laws for comment and improved and standardised tax collection mechanisms, boosting transparency (Zhang, 2002). Authorities also are reducing some business tax rates and addressing gaps in tax regulation (American Chamber of Commerce, 2002a).

However, internal taxes still are applied inconsistently, typically disadvantaging imported goods and foreign business operations; irregular application of the value added tax, VAT, is a particular challenge (World Trade Organization, 2001a).³³ Coordination between central ministries and different levels of government also is poor (American Chamber of Commerce, 2002a). China's WTO package should address some of these challenges, but implementing uniform tax administration remains a significant issue, particularly at lower levels of Government.³⁴ The current preferential tax treatment granted to foreign investors in special economic and state development zones currently is under review. Although no timetable was set, in mid 2002, China's Minister for Finance stated unification of local and foreign corporate tax rates was a policy goal (Economist Intelligence Unit, 2002d).

Transparency Improving Slowly

Lack of transparency remains a significant though, by most accounts, declining business challenge in China. According to the latest international surveys, China ranks sixtieth on a list of just over one hundred economies in terms of transparency perceptions, on a par with countries like Columbia, Mexico, the Dominican Republic and Ethiopia (Transparency International, 2002). While there is still much room for improvement, this ranking is significantly better than that achieved in the mid 1990s, when China, with Indonesia, was considered the least transparent economy in East Asia and ranked fortieth out of forty-one economies surveyed worldwide (Transparency International, 1995).

Many transparency problems arise from the complex web of bureaucratic dealings firms must undertake to establish business operations; business surveys confirm many such decisions lack transparency, posing a major challenge to foreign investment (US Department of State, 2002).

³³ In many cases, imported products are subject to the full value added tax, but domestically produced products are only partly subject to the value added tax, if at all. This distorts prices in favour of the domestic product. Taxes on the same product or activity also can differ between administrative regions (US Trade Representative, 2002).

³⁴ Businesses should be aware that Chinese firms also face internal tax discrimination between provinces.

Local and many foreign businesses rely on relationship based networks to succeed, also hindering transparency. By reducing the role of the state, WTO entry should help increase transparency in future. Nevertheless, Australian businesses should be aware of this problem and develop strategies to deal with it; most Australian business people strongly recommend the best approach is to send clear and early signals their company is not prepared to participate in any non transparent transactions.

Other Business Environment Challenges

A variety of other issues also make China a challenging business environment. While the Chinese market is large in absolute terms, average incomes are low by OECD standards. This restricts the opportunity for foreign firms to sell high value products to the average Chinese consumer, unless they have a particular niche or cost advantage. Moving goods across provincial borders also can be difficult and costly and local authorities can apply laws and standards inconsistently.³⁵

INTERNAL BARRIERS IN CHINA

A key business challenge for all local and foreign businesses is internal protectionism, which creates barriers to the easy internal movement of goods and services. For example, Henan and Anhui provinces ban sales of Guizhou tobacco; due to local fees and taxes, Beijing beer costs five times more in Sichuan than in Beijing. Cars produced in the south of China have been refused number plates in the north and local courts also are known to protect local products and firms. Business liaison suggests this issue remains important and poses a substantial challenge to the central government's ability to implement effectively and enforce WTO commitments.

In the WTO accession negotiations, the central Government committed to removing inter-provincial discrimination and local government behaviour inconsistent with WTO laws. However, discrimination and inconsistent treatment of businesses between different jurisdictions is likely to remain a challenge for some time. Australian companies need to be well informed on this issue, particularly if their business relies on extensive internal distribution networks.

Sources: *People's Daily*, www.english.peopledaily.com.cn, 1 July 2001; World Bank, 2001; US Trade Representative, 2002; World Trade Organization, 2001a.

³⁵ While China has a unitary system of government, the central government has insufficient direct employees in localities and partly depends on layers of provincial and local government officials to carry out its directives (American Chamber of Commerce, 2001a).

Vigorous competition

Chinese markets are highly competitive. Some foreign companies incorrectly perceive all Chinese businesses as inefficient, when many in fact display considerable price and market competitiveness and flexibility; hundreds of thousands of producers, wholesalers and retailers fiercely vie for consumers' attention, making China an extremely competitive marketplace (*Australian Financial Review*, 17 May 2002, p.30). Chinese enterprises also may have to comply to lower environmental and occupational safety and health standards than foreign invested enterprises and may be subject to less rigorous enforcement and penalties (American Chamber of Commerce, 2002a).³⁶ Other issues also contribute to the challenging business environment. External remittance of funds and other foreign exchange transactions remains a difficulty (American Chamber of Commerce, 2001a). Also, authorities still control the prices of a few strategic primary and energy commodities.³⁷

SECURING PAYMENT

Securing payment from customers is another business challenge foreign businesses frequently mention. Multinational businesses regularly report their overdue accounts in China are a higher proportion of total accounts than in most other emerging markets in which they operate. Growing sales volumes do not necessarily translate into increased revenue. Customers may draw out payment to secure informal working capital.

Hence, successful foreign businesses closely monitor their accounts receivable. The existence of non-transparency in the sales and supply chain also is an issue requiring careful monitoring. Other methods of tackling this problem include adjusting sales staff's incentive structures to reward payments received rather than volumes sold.

Source: Economic Analytical Unit interviews with business.

³⁶ For example, China's 2001 National Biosafety Framework declares foreign-invested enterprises in China should comply with their home country's standards if such standards are more stringent than China's (American Chamber of Commerce, 2002a).

³⁷ Prior to WTO entry, market determined prices accounted for 94.7 per cent of retail prices, 83.3 per cent of agricultural prices and 86 per cent of production input prices (World Trade Organization, 2001a).

AUSTRADE IN CHINA

Austrade is the Federal Government's principle export agency, whose mission is to contribute to community wealth by helping more Australians succeed in export and international business. With major offices in Beijing, Shanghai, Guangzhou and Hong Kong and smaller branches in Dalian, Hangzhou, Nanjing, Chengdu and Kunming, Austrade has an extensive Chinese presence and long history of helping Australian business undertake successful trade and investment ventures in China.

Austrade can assist intending exporters in a variety of ways:

- identifying export and investment opportunities for Australian business across China
- researching market size, competitors, product pricing, potential buyers, the legal environment and other useful market information
- pre-qualifying potential partners
- introducing Australian companies to key policy makers and business contacts.

Austrade also assists businesses already in China upgrade and expand their operations. It regularly organises business delegations and promotional activities in China and is a key contact point for referring business opportunities. Some key Austrade tips for business are provided in the Appendix to this chapter.

Case Study: Austrade Assists Australian Education

In recent years, Austrade, in cooperation with other Australian government agencies, has been promoting the Australian higher education sector in China. In 1996, Austrade supported a group of Australian educational institutions to mount a small education exhibition, firstly in Guangzhou and then in Shanghai. This approach was so well received by officials, local education institutions and potential students that it led to an active program of recruitment in several of China's larger cities.

Subsequently, Austrade, working closely with Australian Education International, AEI, significantly increased its education promotion activities in regional centres such as Dalian, Chengdu, Hangzhou and Wuhan, and Australian educational institutions have been quick to recognise the considerable opportunities China presents. The response has been very encouraging, with students studying in Australia increasing dramatically. (See Chapter 7 – *Services*.) Also, the number of courses Australian institutions provide in China has increased rapidly.

Austrade contact details:

Export Hotline: 13 28 78

Website: www.austrade.gov.au

(Austrade China office details are contained in the back of this publication, along with other general details of Australian Government assistance to Australian businesses in China.)

CHINA'S WTO CHALLENGE

While implementing its WTO entry package will bring significant medium to long term gains for China and its trading partners, it also will involve significant short term challenges. In particular, the scale of required administrative and legal change and related training needs are immense and strengthening the legal and regulatory framework will take some years to achieve. Unsurprisingly, results to date have been mixed. Early evidence indicates Chinese authorities are managing implementation processes to limit any dramatic social impacts.

China's ongoing embrace of market mechanisms also will involve further substantial economic restructuring. Although China is well advanced in encouraging firms and consumers to respond to price signals, it is unclear whether all goods, services, labour and credit markets are developed sufficiently to adjust to these changes. However, the impressive pace of reform since 1978 gives confidence the Government gradually should overcome impediments to implementing commitments, thereby gaining the full economic benefits from accession.

The Implementation Challenge

To implement WTO successfully, China must carry out extensive legislation and training. The authorities must legislate hundreds of new laws and regulations to meet its WTO commitments; already it is well advanced in this process (Zhao, 2002; Suo, 2002). As well as providing a first point of reference for trade inquiries and disseminating WTO information, central and provincial governments are establishing WTO centres across the country (Liao, 2002; Peng, 2002; Yao, 2002). Thousands of national, provincial and local government officials and state enterprise managers are receiving training about the implications of WTO membership (Shen, 2002). This training also is designed to modernise the government's administrative culture, making it less interventionist and more business and market friendly (Liao, 2002; Yao, 2002).³⁸

Through 2002, China's record in implementing its WTO commitments has been mixed. Importantly, on 1 January 2002, the Government generally met WTO commitments to reduce average tariff levels to 12 per cent. Chinese authorities also are establishing numerous inquiry points for foreign and local businesses, are publishing laws relating to international trade and investment and are issuing more licenses to foreign investors in key sectors including banking, insurance, retail, wholesale and logistics. As well, authorities are expanding trading rights to local and foreign companies. In Shenzhen, authorities are considering opening some sectors to foreign participation, including finance, tourism and logistics, ahead of the agreed WTO schedule (Economist Intelligence Unit, 2002f).³⁹

³⁸ For example, senior authorities in Guangzhou and Shanghai require all relevant officials to undertake WTO training; these can take the form of short briefings, half-day seminars or longer specialised courses at Universities and other institutes (Shen, 2002; Peng, 2002; Yao, 2002). Larger trade oriented businesses are being invited to participate in these training efforts. Provincial authorities also are establishing information and training databases for business access and linking with domestic and international WTO experts (Liao, 2002).

³⁹ Even prior to WTO entry, Shenzhen authorities already encouraged global retail giants including Tesco and WalMart and global distribution majors including DHL to establish ventures in the city (Peng, 2002).

However, China has not yet fully met some other key commitments or is attempting to manage the process of liberalisation. Some tariff reductions appear to fall short of WTO commitments, on items including chicken meat and photographic film (US Trade Representative, 2002; *Australian Financial Review*, 8 July 2002, p.8). Authorities also are employing non tariff barriers to restrict some imports; examples include requiring quarantine inspection permits for agricultural products, issuing agreed quotas late or only partially, requiring approval certificates for information technology products and requiring licensing from two or three layers of authority (American Chamber of Commerce, 2002c).⁴⁰

Regulatory and implementation transparency remains challenging and some draft laws are being released only just prior to implementation (Economist Intelligence Unit, 2002b; American Chamber of Commerce, 2002c). Inconsistent application of the value added tax between local and imported products remains a problem (American Chamber of Commerce, 2002c). Some countries suspect China still may be exporting subsidised corn and authorities have not yet issued regulations governing foreign auto financing (Economist Intelligence Unit, 2002c; *Asian Wall Street Journal*, www.online.wsj.com, 2 September 2002). Some central government officials have openly stated in the state run media China should manipulate standards, technical regulations and sanitary and phytosanitary measures to limit imports (US Trade Representative, 2002).⁴¹

As China's WTO package is wide-ranging and ambitious, most analysts are unsurprised by these mixed short term outcomes. Instead, they look for improvement as authorities bed down new systems and political anxiety recedes about possible social disruption. The scale of change required to put in place these new laws and regulations and successfully implement them would challenge many developed economies; China's size, complexity and development level increase the challenge. However, WTO members will carefully observe progress to ensure authorities work in good faith to implement commitments as quickly as is feasible given these constraints. China's annual transitional review will be an important tool for examining the timely implementation of its WTO commitments. China only will secure expected gains from WTO accession if it fully implements its commitments; slowing or stalling implementation will reduce the boost to living standards China's population would otherwise receive.

The Restructuring Challenge

WTO entry will continue and reinforce China's move to the market, further restructuring the economy and exposing domestic producers to greater competition. Parts of the economy are not well prepared for this change and as a result, successful adjustment will require further key reforms to achieve more flexible and efficiently functioning domestic markets.

⁴⁰ The authorities issued tariff-rate quotas for private traders to import sugar in early April, but later suspended these in an attempt to protect domestic industry; they also delayed issuing car and fertiliser quotas (*Far Eastern Economic Review*, www.feer.com, 16 May 2002).

⁴¹ Foreign business also holds strong concerns that implementation of WTO commitments will be much less vigorous at lower levels of government. Local government is very supportive of entrenched protected domestic industries and has little understanding of or sympathy for the broader market access benefits of WTO accession (American Chamber of Commerce, 2002a).

While China's true private sector and most coastal provinces already are relatively flexible and market oriented, some state owned enterprises, particularly in protected financial services, heavy industry and utilities and hinterland provinces, still operate on a non-commercial basis and are subject to government intervention, price controls and are protected from competition. Parts of Chinese agriculture operate at close to international prices, but much land intensive agriculture still is inefficient and unprofitable, constrained by small plot sizes, low technology and government intervention in cropping patterns. (See Chapter 4 – *Agriculture and Agribusiness*.) Consequently, sectors like land intensive agriculture and state owned heavy industrial enterprises may be less well equipped to deal with WTO entry, as they may not be able to respond to changing prices and adjust quickly to reallocate human, capital and physical resources.

To adjust to WTO entry and gain the full benefits of accession, authorities will need to allow greater labour and capital market flexibility and continue agricultural and state owned enterprise reforms. Labour shedding in state owned enterprises and agriculture may create social problems unless labour market rigidities, a lack of national employment agency networks and weak unemployment and pension systems are addressed rapidly. (See Chapter 2 – *Economic Overview*.) Deepening capital markets and increasing the banking sector's commercial orientation will be important in allowing viable new firms obtain finance to develop and absorb surplus labour, particularly from the state owned sector. China also will need to continue improving physical and human infrastructure; key challenges include raising the efficiency of road, rail, air travel and ports and boosting education outcomes. (See Chapter 6 – *Manufacturing and Infrastructure* and Chapter 7 – *Services*.)

Much of the regulatory framework needed to support functioning markets, including well defined property rights, effective bankruptcy laws, anti-trust legislation and intellectual property protection, needs continuing improvement (Economic Analytical Unit, 2002). Providing farmers secure, saleable titles to their land would facilitate necessary agricultural plot consolidation, speed rural-urban migration, increase land tenure certainty for farmers and hence boost agricultural investment and efficiency. Further privatisation of SOEs will increase competitive pressures, reduce the non performing loan burden on state owned banks and increase returns on investment.

IMPLICATIONS

China's entry to the WTO will significantly deepen China's economic integration with the world economy. This should further lift Chinese incomes and improve the sustainability and quality of economic growth. However, beyond liberalised trade and investment barriers, China's WTO commitments also will reinforce ongoing market oriented reforms, continue restructuring the economy and gradually increase business environment certainty. These structural reforms should boost trade and investment transparency and limit authorities' influence on business, levelling the playing field for private domestic and foreign businesses alike. A progressively more transparent legal and corporate governance system also should reduce reliance on relationships, increasing the role of sound business models in pursuing growth and profits.

This progress will not be rapid or certain, but the existence of a more open trade and investment regime, increased transparency and scrutiny, sounder commercial laws based on non-discriminatory principles, more market oriented firms and financial institutions and gradual strengthening of courts and other government institutions to enforce laws slowly should improve the business environment. To date, WTO membership is proving a major incentive for on-going reform and hopefully will prevent policy reversals. However, doing business in China will remain complex and challenging for many years. Hence, to succeed, Australian businesses entering China need robust, well-researched business plans implemented with strong and committed human and financial resources.

REFERENCES

- Adhikari, R., and Y. Yang, 2002, 'China's Increasing Openness: threat or Opportunity to Others', June, Paper presented to ABCDE-Europe Conference, Oslo, www.worldbank.org, accessed September 2002.
- American Chamber of Commerce, 2001a, *AmCham 2001 White Paper*, www.amcham-china.org.cn, accessed May 2002.
- , 2001b, 'Views of American Companies Regarding Arbitration in China', presentation given by Tim Stratford, Chairman, AmCham China, www.amcham-china.org.cn, accessed May 2002.
- , 2002a, *AmCham 2002 White Paper*, www.amcham-china.org.cn, accessed June 2002.
- , 2002b, 'February 2002 Business Brief', www.amcham-china.org.cn, accessed May 2002.
- , 2002c, 'WTO Implementation Report – Fall 2002', www.amcham-china.org.cn, accessed October 2002.
- Brown, R., 2002, Economic Analytical Unit interview with Partner, Lehman Brown, Beijing, March.
- CEIC, 2002, Asian economic database, Hong Kong, accessed October 2002.
- Centre of Policy Studies, 2002, Consultancy supplied to Economic Analytical Unit, Melbourne, June.
- Cha, L., 2001, 'The Future of China's Capital Markets and the Role of Corporate Governance', Speech given by Vice Chairman, China Securities and Regulatory Commission, 18 April 2001, www.csrc.gov.cn, accessed August 2002.
- China OnLine, 2002, 'China's investment environment continues to improve', 9 January 2002, accessed January 2002.
- China Securities Regulatory Commission, 2002, 'Guidelines for Introducing Independent Directors to the Board of Directors of Listed Companies', 16 August 2002, www.csrc.gov.cn, accessed September 2002.
- Department of Foreign Affairs and Trade, 2002, Information supplied by Office of Trade Negotiations, September, Canberra.
- Drysdale, P., 2002, 'China, the WTO and East Asian Economic Diplomacy', in Drysdale, P. and K. Eshigaki (eds), *East Asian Trade and Financial Integration: New Issues*, Asia-Pacific Press, Canberra.
- East Asia Analytical Unit, 1997, *China Embraces the Market: Achievements, Challenges and Opportunities*, Department of Foreign Affairs and Trade, Canberra, May.
- Economic Analytical Unit, 2002, *Changing Corporate Asia: What Business Needs to Know*, Department of Foreign Affairs and Trade, Canberra, March.
- Economist Intelligence Unit, 2001, 'China: Business Outlook: Country View', 25 October 2001, www.viewswire.com, accessed May 2002.

- , 2002a, *World Investment Prospects: The Next FDI Boom*, London, March.
- , 2002b, 'WTO progress report', 14 May 2002, www.viewswire.com, accessed May 2002.
- , 2002c, 'Chinese premier addresses trade forum', 21 May 2002, www.viewswire.com, accessed May 2002.
- , 2002d, 'Foreign companies face tax rises', 4 June 2002, www.viewswire.com, accessed September 2002.
- , 2002e, 'China suspected of subsidising maize exports', 20 June 2002, www.viewswire.com, accessed August 2002.
- , 2002f, 'Early market liberalisation in Shenzhen', 24 June 2002, www.viewswire.com, accessed August 2002.
- , 2002g, 'Second judicial interpretation of bankruptcy law', 13 August 2002, www.viewswire.com, accessed August 2002.
- , 2002h, 'More accounting regulations on the way', 29 August 2002, www.viewswire.com, accessed August 2002.
- , 2002i, 'Before Enron, there was Guangxia', 29 August 2002, www.viewswire.com, accessed August 2002.
- , 2002j, 'Accounting profession continues to develop', 29 August 2002, www.viewswire.com, accessed September 2002.
- , 2002k, 'Intellectual property update', 4 September 2002, www.viewswire.com, accessed September 2002.
- Godwin, A., 2002, Economic Analytical Unit interview with Partner, Linklaters, Shanghai, March.
- Hay, D., 2002, Economic Analytical Unit interview with General Manager, Hayco, Hong Kong, February.
- Hobgood-Brown, K., 2002, Economic Analytical Unit interview with Partner, Deacons Lawyers, Sydney, September.
- Lan, Z., 2002, Economic Analytical Unit interview with Deputy Director, China Development Institute, Shenzhen, February.
- Lardy, N., 2002, *Integrating China into the World Economy*, The Brookings Institution, Washington.
- Liao, G., 2002, Economic Analytical Unit interview with Deputy Director General, Guangdong Department of Foreign Trade and Economic Cooperation, Guangzhou, March.
- Mahon, D., 2002, Economic Analytical Unit interview with Managing Director, CMG Mahon, Beijing, March.
- Meng, X., 2002, Economic Analytical Unit interview with Fellow, Economics Division, Research School of Pacific and Asian Studies, Australian National University, Canberra, June.

- Minter Ellison, 2002, 'Chinese Legal Update', Publication supplied to the Economic Analytical Unit, Melbourne, May.
- O'Shea, B., 2002, Economic Analytical Unit interview with Partner, Hunt and Hunt Lawyers, Sydney, July.
- Peng, X., 2002, Economic Analytical Unit interview with Vice Director-General, Shenzhen Municipality Bureau of Foreign Trade and Economic Cooperation, Shenzhen, February.
- Shen, B., 2002, Economic Analytical Unit interview with Professor and WTO Senior Visiting Scholar, Guangdong University of Foreign Studies, Guangzhou, March.
- Stapleton, P., 2002, Economic Analytical Unit interview with Partner, Blake, Dawson and Waldron, Shanghai, March.
- Suo, B., 2002, Economic Analytical Unit interview with Division Director, Ministry of Foreign Trade and Economic Cooperation, Beijing, March.
- Transparency International, 1995, 'Corruption Perceptions Index 1995', 15 July 1995, www.transparency.org, accessed August 2002.
- , 2002, 'Corruption Perceptions Index 2002', 28 August 2002, www.transparency.org, accessed August 2002.
- US Department of State, 2002, 'Country Commercial Guide – China', www.state.gov, accessed May 2002.
- US Trade Representative, 2002, 'National Estimates of International Trade Barriers 2002 – China', www.ustr.gov, accessed May 2002.
- Wang, Z., 2002, Economic Analytical Unit interview with Director and Executive Vice President, Guangdong Development Bank, Guangzhou, March.
- Warren, J., 2002, Economic Analytical Unit interview with Partner, PriceWaterhouseCoopers, Guangzhou, March.
- World Bank, 2001, 'China's Local Trade Barriers: A Hard Nut to Crack', Transition Newsletter July-August-September 2001, www.worldbank.org, accessed July 2001.
- , 2002, *World Bank World Tables* database, CEIC database, supplied by Econdata, Canberra, accessed August 2002.
- World Trade Organization, 2001a, *Working Party Report on the Accession of the People's Republic of China*, December 2001, www.wto.org, accessed January 2002.
- , 2001b, *Schedule of Commitments of Goods*, December 2001, www.wto.org, accessed January 2002.
- , 2001c, *Schedule of Commitments of Services*, December 2001, www.wto.org, accessed January 2002.
- Wu, Y., 2002, Economic Analytical Unit interview with Deputy Director, Development Planning Commission of the Shanghai Municipal People's Government, Shanghai, March.

Yao, W., 2002, Economic Analytical Unit interview with Associate President, Shanghai WTO Affairs Consultation Centre, Shanghai, March.

Zhao, H., 2002, Economic Analytical Unit interview with Division Director, Department of Treaty and Law, Ministry of Foreign Trade and Economic Cooperation, Beijing, March.

Zhang, J., 2002, Economic Analytical Unit interview with Deputy Director General, Policy and Fiscal Affairs Department, Ministry of Finance, Beijing, March.

Zhu, L., 2002, Economic Analytical Unit interview with Professor and Vice-Dean, Faculty of International Law, East China University of Politics and Law, Shanghai, March.

APPENDIX

Table 1A.1

Summary of China’s Major WTO Commitments

Measure	Commitment	Time frame for implementation
Trade in goods and services		
Import tariffs	Progressively cut to an average of 10 per cent for all goods; cut to 15.7 per cent for agricultural products and 9 per cent for industrial products	By 2010; most cuts to occur by 2006.
Non-tariff barriers	Tariff rate quotas will replace licensing and quotas on a variety of agricultural and industrial products	Immediate
	Increasing shares in tariff rate quotas guaranteed to non-state traders	Immediate
	Trading rights opened to all businesses	Progressively by 2005
	All export subsidies eliminated	Immediate
	Domestic agricultural support to be limited to 8.5 per cent of the value of agricultural production for both product-specific and non-product-specific support	Immediate
	Anti-dumping, subsidies, countervailing measures, technical barriers to trade and sanitary and phytosanitary measures to be brought in line with WTO requirements	Immediate
	Most price controls and all dual trade pricing removed	Immediate
	Uniform administration of trade-related laws to be enforced across China	Immediate
	China will undergo an annual transitional review of its WTO compliance	Annually from 2002 for 8 years
Services	Applicants will not require invitation to apply from responsible authority	Immediate
	Foreign service suppliers can form partnerships with any legal Chinese entity	Immediate
	Services trade licences will not restrict imports	Immediate
	All relevant procedures and conditions to be published prior to becoming effective	Immediate
	Application decisions will be made promptly and both successful and unsuccessful candidates notified in writing	Immediate

Measure	Commitment	Time frame for implementation
Foreign investment regulations		
FDI caps	Reductions to a wide variety of FDI limits, particularly in services. (See Chapters 4-7 for details.)	Progressively to 2008
Trade-related investment measures	Authorities cannot prohibit FDI because it will affect Chinese suppliers	Immediate
	All requirements for foreign exchange balancing, trade balancing, export performance, local content, technology transfer and research eliminated	Immediate
Commitments made by other WTO members		
Tariffs applied to Chinese exports	Chinese exports will benefit from improved access to global markets through being part of the normal, 'most favoured nation', trading system	Immediate (apart from restrictions on next line)
Restrictions applied to China	Restrictions on China's exports to other countries, particularly in areas including textiles and apparel, will gradually be lifted	Gradually to 2005; some restrictions in place till 2008-2010

Sources: World Trade Organization, 2001a, 2001b, 2001c.

AUSTRADE TIPS FOR AUSTRALIAN BUSINESS IN CHINA

1. Research, research, research!
2. Choose the right partners. In-market contacts are often more important than product and price.
3. *Guanxi* (relationships) is important – but be wary of strangers offering the world and proceed with caution.
4. Talk to other Australians with experience in China: Australia-China Business Council members in Australia; China-Australia Chamber of Commerce members in China; and Austrade's network in China.
5. Seek qualified contract and tax advice and ensure thorough due diligence. If you are setting up in China, it is important to get the business and tax structure right from the start.
6. The language of law in China is usually Chinese – not English. A qualified legal firm with a presence in China should review all contracts.
7. Where appropriate, use professional interpreting and translating services – particularly for formal presentations and the explanation of technical issues. Opportunities are often missed due to poor quality translation and interpreting.
8. Be prepared for tough negotiations – be firm, be polite, be creative ... but be prepared to say no.
9. Halve your expectations, double your time and budget.
10. Don't look for black and white – be prepared to deal with 'grey' issues.
11. Respect Chinese cultural and business etiquette, but don't lose sight of your own identity and business purpose.
12. Remember, well-managed companies in Australia operate well-managed companies in China.
13. Stay positive and enjoy the experience.

ECONOMIC OVERVIEW

KEY POINTS

- In the late 1990s and early 2000s, the prospect of WTO entry and lessons from the Asian crisis spurred Chinese authorities to continue economic reform.
- These reforms continue to drive the economy's changing structure. Private sector activity gradually is replacing the state sector and collective activity. Manufacturing and services are expanding further at the expense of agriculture.
- Largely due to these reforms and on-going market opening, the Chinese economy continues to grow strongly, boosting trade, attracting strong foreign direct investment, FDI, inflows and further integrating China with the world economy.
- In turn, this rapid growth continues to improve Chinese living standards, expanding urban affluence and further cutting rural poverty.
- However, continued rapid growth is not inevitable. China faces several major inter-related economic challenges including improving financial system solvency and operation, boosting state owned enterprise, SOE, performance and establishing a functioning social security system.
- Nevertheless, China's economy is likely to grow by a robust 7 per cent per year over the next five to ten years.

By underpinning reforms already underway in China, WTO entry should help sustain strong economic growth and generate rapidly growing markets for local and foreign suppliers. Assuming the Government maintains its reform commitment, the economy should continue to grow strongly, though on-going banking, SOE, fiscal and social welfare challenges probably will reduce annual growth below its full potential of 8 per cent.¹

REFORMS CONTINUE

In the late 1990s and early 2000s, the Asian financial crisis and imminent WTO entry spurred Chinese authorities to deepen economic reforms. Major focuses included addressing state owned firms and financial institutions' performance, further developing financial markets and promoting private enterprise, improving macroeconomic policy management and further opening the economy to world markets.

LESSONS FROM THE ASIAN CRISIS

Chinese authorities quickly recognised the Asian financial crisis provided important lessons, particularly for their financial sector policies, including the need for:

- a well regulated and competitive financial sector that allocates funds according to market criteria
- a credible exchange rate policy
- sound corporate governance
- competitive markets for goods and services
- a fully commercially oriented banking system, accountable for its own lending decisions
- increased corporate funding via efficient and transparent capital markets, to expose firms to market scrutiny
- a well developed institutional investor class
- enforceable bankruptcy laws, and
- independent and well resourced regulators.

The crisis also exposed the danger of the relationship based model of business on which many Asian economies, including China, operate. Overall, the Chinese Government drew the correct conclusions from the crisis and is aware of the need to address most of the key issues above prior to opening its capital account. It also must move vigorously to overcome serious weaknesses in the banking, state owned enterprise, SOE and pension sectors to protect itself from serious financial system losses and their fiscal implications.

Sources: East Asia Analytical Unit, 1999; Economic Analytical Unit, 2002.

¹ This chapter analyses China's economic performance since 1997; the East Asia Analytical Unit's previous major China report *China Embraces the Market, Achievements, Constraints and Opportunities* details China's pre-1997 economic performance (East Asia Analytical Unit, 1997).

SOE Reform Deepening

As the Government increasingly forces SOEs to face greater commercial disciplines, private and foreign firms eventually should operate in a fairer commercial environment. Since the mid 1990s, authorities stepped up SOE reforms to improve their efficiency and profitability, including further separating firm decision making from ministerial control, tightening budget constraints, reducing overstaffing and removing some obligations to supply social services to workers. Authorities also are privatising many small and medium sized SOEs, corporatising and listing some larger ones, using bankruptcies and mergers to improve performance and focussing more on the corporate governance of large SOEs.² Consequently, over capacity in key sectors has declined and SOE profitability is improving (Chinese National Bureau of Statistics, 1999, 2000, 2001).³ In early 2002, the Government announced it might sell controlling stakes in large SOEs to 'strategic investors', signalling an important new phase in SOE reform (Economist Intelligence Unit, 2002c).

Financial Sector Reform Proceeding

Over time, ongoing financial sector reform should improve banking practices and develop financial markets, improving private businesses' access to investment funds and foreign financial institutions' capacity to compete in local financial markets.

Banking system reform

Since the Asian financial crisis, the Government has given high priority to overcoming serious weaknesses in the state dominated banking system, injecting new capital and establishing asset management companies.⁴ By mid 2002, the asset management companies had disposed of 15 per cent of the RMB 1.4 trillion (US\$169 billion) in non performing loans they initially purchased, with an average recovery rate of 22 cents in the dollar (People's Bank of China, 2002a).⁵

Authorities also have made considerable efforts to reform the state banks, rationalising branches and staffing, improving accounting and disclosure standards and tying management incentives to bank performance (East Asia Analytical Unit, 1997, 1999; Brooks, 2002). These efforts gradually

² By 2001, authorities had liquidated, restructured or sold more than half of the 72 000 small and medium sized SOEs operating in 1995 (Organisation for Economic Cooperation and Development, 2002; World Bank, 2002). Other sources suggest the rate of closure and restructuring was even higher (World Bank, 2000). Recent corporate governance reforms require listed companies' boards to have a certain proportion of independent directors by mid 2003 (Economic Analytical Unit, 2002).

³ The improvement in profits was partly driven by one off factors. The ten largest SOEs made 62 per cent of all profits in 2000, three of whom are petroleum SOEs which benefited from rising oil prices (US Department of Agriculture, 2001). Also, lower interest rates and reduced debt servicing due to debt-for-equity swaps and other restructuring assisted.

⁴ In 1998, the Government injected RMB270 billion (US\$32 billion) into the major banks to recapitalise their balance sheets and then established four asset management companies to deal with non performing loans built up prior to 1995 (Lardy, 1999; East Asia Analytical Unit, 1999; Economist Intelligence Unit, 2001). The asset management companies now are disposing of collateral and recovering funds by conducting debt for equity swaps, auctioning parcels of non performing loans and debt restructuring (East Asia Analytical Unit, 1999).

⁵ This leaves non performing loans in asset management companies hands worth about 12 per cent of GDP. In the period since 1999, the asset management companies also have 'informally' purchased an additional RMB300 billion (US\$36 billion) of non performing loans from the big four banks, making the face value of their portfolios about RMB1.7 trillion (US\$205 billion) (Ma et al., 2002).

have improved performance and reduced remaining non performing loans burdens; the latest official statistics suggest non performing loans have fallen to about 25 per cent of major bank loans, from around 30 per cent in the late 1990s (People's Bank of China, 2002b; Japan Asia Securities, 2002).⁶ In early 2002, the authorities also required banks to meet new, even more stringent standards for loan classification and provisioning, further approaching international best practice (International Monetary Fund, 2002c).

Other financial institutions

Authorities also have made considerable efforts to reform the insurance and the brokerage sectors (East Asia Analytical Unit, 1997, 1999). The insurance sector, previously a state monopoly is gradually opening up to domestic and foreign investors. (See Chapter 7 – *Services*.) The Government recognises the sector's importance as a supplementary source of retirement income, a provider of long term capital, particularly for infrastructure projects and as a source of institutional investors in the share market.

Financial markets

Authorities also are encouraging direct financing of companies by developing share and bond markets, to improve SOE performance and provide an alternative finance source to banks. As a result, share market capitalisation is growing rapidly (Economic Analytical Unit, 2002). However, the proportion of tradeable shares remains low and the market still has many problems and is highly volatile.⁷ (See Chapter 7 – *Services*.) The government and corporate bond markets also are only in their infancy.

Deregulating the Private Sector

The private sector is the most rapidly growing of all business ownership groups, increasing the economy's commercial orientation and eventually providing foreign businesses good opportunities to form partnerships and secure customers. Local and central authorities increasingly recognise the importance of the private sector as the primary engine for jobs growth. In 1997, the National Party Congress recognised private enterprise was an essential part of the 'socialist market' system and in 1999, the Government amended the constitution to recognise and legally support private enterprise (Panitchpakdi et al., 2002).

Moreover, central and local authorities continue to remove restrictions on private business, easing company registration rules, permitting hundreds of larger private firms to trade internationally, lowering minimum capital requirements for bank borrowing and boosting access to bank finance (Asian

⁶ However, other analysts estimate remaining non performing loan levels at much higher levels, up to 50 per cent of GDP or even higher (International Monetary Fund, 2002a; Lardy, 2001).

⁷ The main reason for this volatility is that most listed companies are SOEs and can only list up to 30 per cent of their capital, giving shareholders little leverage over corporate management. The Government has carefully controlled the flow of initial public offers to keep share prices high, but this has inflated prices, making the market uncertain about share valuations. Corporates also suffer from poor corporate governance standards and the market from frequent insider trading. (See Chapter 7 – *Services*.)

Development Bank, 2002b; Wang, Z., 2002).⁸ The Communist Party also may open party membership to private entrepreneurs in late 2002. However, some restrictions still limit private business, including limited property rights, minimal access to bank finance, difficulties in the legal environment and enforcement, a challenging taxation system and other non transparent bureaucratic requirements (International Finance Corporation, 2000; Asian Development Bank, 2002b).

Macroeconomic Policy Management Improving

Ongoing government reforms to fiscal policy should reduce the risk of sharp future rises in corporate taxes and also provide increased funding for banking debt resolution and necessary infrastructure investment, helping to ensure a business friendly environment. At central and especially provincial government levels, inadequate administrative systems, poor governance and a lack of transparency have hampered government attempts to control revenues and expenditure. To address this, the Government continues to tighten supervision of departmental expenditure through improved accounting and classification standards and is standardising revenue collection processes and management (Zhang, 2002).⁹ Monetary policy operation has changed little since the mid 1990s.

Trade, FDI and Exchange Rate Liberalisation

Entering China's market is becoming easier. By 2002, average import tariffs fell to 12 per cent, half their level in 1996. The Government also has reduced quantitative restrictions on many imports, particularly agricultural products, liberalised some licensing requirements and made some customs procedures more transparent. Moreover, foreign companies can now invest in many sectors, although limits remain on the share of ownership they can hold in many industries. FDI licensing and approvals administration now is more transparent and authorities are reducing production and sales conditions previously applied to foreign investors. Although exchange rate policies have remained largely unchanged, remitting profits is becoming less difficult; since the late 1990s, foreign firms have been allowed to repatriate declared joint venture dividends.

ECONOMY TRANSFORMING

Reforms are promoting rapid economic structural changes. The share of private ownership and employment continues to grow, absorbing resources from the state owned and cooperative sectors and levelling the playing field for private and foreign firms. Manufacturing and services continue to grow faster than agriculture. To maximise profit, businesses will need to distinguish between China's emerging and maturing sectors when deciding where to invest.

⁸ For example, banks can use more innovative methods to determine creditworthiness; some banks are using bills of lading, stocks, group joint assets, even debts payable, as collateral for loans. This allows them to substantially expand their loan book to the private sector. At some institutions, up to 80 per cent of recent loans to private small and medium sized enterprises use these new forms of collateral (Wang, Z., 2002).

⁹ Consequently, government revenue raising improved from a low of just under 11 per cent of GDP in the mid 1990s to over 18 per cent in the first half of 2002 (CEIC, 2002).

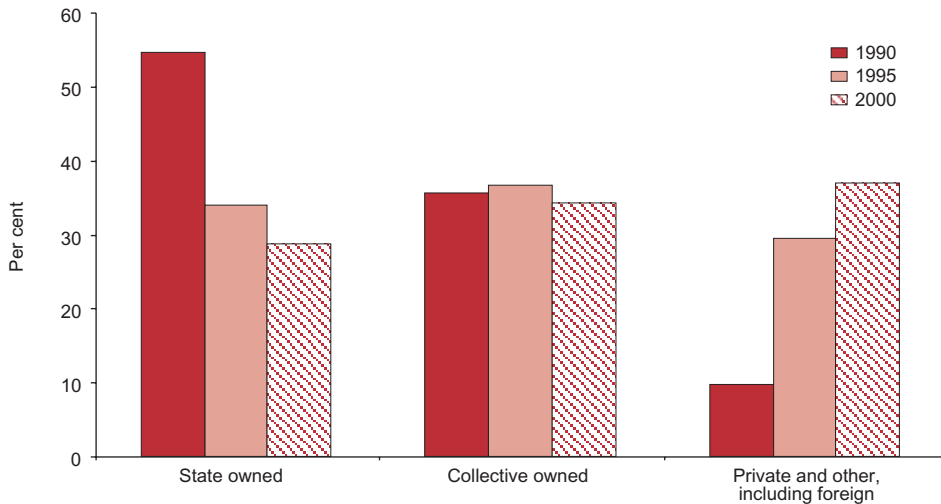
Private Sector Growing Rapidly

The private sector continues to grow rapidly; by 2000, 'individual and other' types of enterprises produced roughly the same share of industrial output as the state owned and collective owned sectors (Figure 2.1).¹⁰ In recent years, growth in private sector output contributed disproportionately to China's growth, due to its strong competitiveness, lesser restrictions on private enterprise and the privatisation of smaller SOEs (CEIC, 2002).

Figure 2.1

Private Sector Continues to Grow as Share of Industry

Shares of Gross Industrial Output, Per cent, 1990, 1995 and 2000



Note: The Chinese statistical authorities re-defined different categories of ownership in the late 1990s, so figures before and after 1998 are not strictly comparable.

Source: CEIC, 2002.

Manufacturing and Service Sectors Continue Growing

In the late 1990s and early 2000s, higher productivity manufacturing industry, services and construction sectors continued to grow strongly while agricultural growth slowed; in 2001, agriculture accounted for only 15 per cent of GDP (CEIC, 2002; Appendix Table 2A.1). In recent years, growth of major 'traditional' manufacturing sectors like textiles, clothing and footwear levelled off or fell, while growth of higher value added industries like household goods, computers and related components increased strongly (CEIC, 2002). (See Chapter 6 – *Manufacturing and Infrastructure*.)

¹⁰ According to the Asian Development Bank, the 'true' private sector may account for up to 50 per cent of the total economy, when joint ventures with foreign participation, private agriculture, and 'private' collective firms also are included (Asian Development Bank, 2001).

Labour Markets Continue Changing

Workers are rapidly changing jobs as the economy reforms and grows. Although over 36 million former SOE workers have been retrenched since 1996, the great majority are finding new employment elsewhere, mainly with private and foreign employers; in 2001, total employment was 5 per cent higher than in 1997 (CEIC, 2002). Officially recorded urban unemployment stood at 3.6 per cent at the end of 2001, although Chinese officials admit the true rate may be much closer to 10 per cent (Economist Intelligence Unit, 2002a).

ECONOMY STRONG, GLOBAL INTEGRATION INCREASING

In turn, China's ongoing reform and restructuring are contributing to a strong macroeconomic performance. Since the mid 1990s, China achieved the fastest growth of any major economy without creating inflation, providing an excellent market for foreign traders and investors. Its global integration also continues to increase; international trade is growing strongly and China attracts large and increasing amounts of FDI.

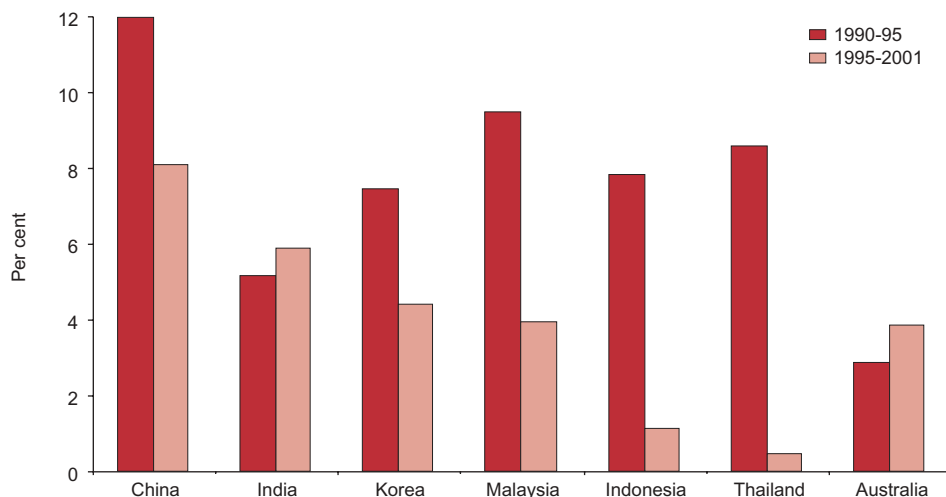
Macroeconomic Fundamentals Sound

Since the East Asian financial crisis, China's economic growth continued to significantly outperform its regional neighbours. Between 1995 and 2001, the economy grew by 8.1 per cent per year on average, although this is somewhat slower than the early 1990s (Figure 2.2, Appendix Table 2A.1). China's recent per capita growth has been equally impressive, outstripping all other major Asia-Pacific economies by a considerable margin; between 1995 and 2001, China's per capita GDP grew by over 7 per cent per annum (International Monetary Fund, 2002d).

Figure 2.2

China Out Performs Other Asia-Pacific Economies

Real GDP Growth Rates, Selected Asia-Pacific Economies, Per cent, 1990-2001



Source: International Monetary Fund, 2002d.

CHINA'S ECONOMIC STATISTICS

While China's growth statistics look impressive, over the years, analysts have questioned their credibility. In the early and mid 1990s, most observers believed official statistics since 1978 overstated real annual GDP growth by about 2 percentage points. Recent research suggests some upward bias remains. In 1998, for example, energy consumption fell by 4.3 per cent and severe floods affected agricultural output, yet real GDP data rose by 7 per cent according to official sources. Also, some evidence exists that provincial leaders have incentives to overstate production figures to enhance their career prospects, and aggregated provincial growth rates exceed the national growth rate.

However, China's statistical authorities are working hard to raise the quality of national accounts data. While provinces still appear to overestimate growth by an average of 1 to 2 percentage points, this exaggeration is declining and the Chinese National Bureau of Statistics adjusts these figures to obtain more accurate aggregate national GDP data. Leading analysts think the Bureau is increasingly succeeding in this effort (Brooks, 2002; Lardy, 2002). However, as this adjustment process is not particularly transparent to outsiders and some other sources of potential error exist, doubts remain in some quarters about the reliability of Chinese GDP data.¹¹ Nevertheless, very strong recent growth in other major verifiable indicators, including international trade and government revenue, gives confidence the Chinese economy continues to expand robustly.

Sources: Lardy, 2002; Brooks, 2002; Wu, H., 2002; East Asia Analytical Unit, 1997; Rawski, 2001; CEIC, 2002.

China's economic growth in the first half of 2002 remained strong, boosted by recovering exports, public servant salary increases, continued strong public infrastructure spending and a rapid pick-up in FDI inflows.

Despite strong growth since the mid 1990s, factors including industrial overcapacity, an expanding and increasingly competitive private sector and increased import penetration kept inflation subdued (Appendix Table 2A.1). Until 1998, growth did not rely on significant government spending, but since then a surge in public spending on infrastructure and public service salaries has boosted government budget shortfalls considerably (Appendix Table 2A.1). This increased government domestic debt to around 18 per cent of GDP by the end of 2000 (International Monetary Fund, 2002a).

¹¹ Other potential errors include deflators used to convert nominal GDP to volume figures; in periods of high inflation like the early 1980s, this probably added 2 percentage points to official growth figures (East Asia Analytical Unit, 1997). However, as China typically had little or no inflation and even deflation in recent years, this is unlikely to be a significant source of error. Furthermore, offsetting this possible upward bias, Chinese statistics traditionally underestimate the size of the services sector, which is growing very strongly. Analysts consider any biases introduced by these two factors could outweigh each other.

CHINA'S MEDIUM TERM FISCAL POSITION

While China's official fiscal position appears relatively sound, it faces considerable medium term fiscal challenges. To begin, official budget deficit data exclude important liabilities; including these doubles the current annual budget deficit to around 5-6 per cent of GDP. China also has a large stock of 'off-balance sheet' and contingent liabilities, including non performing loans in the banking system. Despite the government-funded asset management companies purchasing a large amount of non performing loans from the major banks in the late 1990s, some analysts believe banks still hold non performing loans much larger than official statistics; some estimates suggest these could run as high as 50 per cent of outstanding loans, which is equivalent to about 50 per cent of GDP.

Ongoing SOE reform and the growth of the non state sector also is placing pressure on government funding of social security. Although the Government is relieving SOEs from their responsibility to provide benefits like age and unemployment pensions, housing and medical benefits, it has not yet developed a sustainable self-funding system to provide such benefits. Even in the mid-1990s, the World Bank estimated long term contingent social security obligations such as these could be equivalent to 100 per cent of GDP. Together with the existing stock of non performing loans, this suggests a considerably greater fiscal debt burden than official statistics imply, although future bad loan recovery and success in developing a more self-funding social security system should partly reduce some of these obligations.

Sources: International Monetary Fund, 2002a; Lardy, 2001; World Bank, 1994.

Trade and International Exposure Increasing

China's increasing openness is boosting China's integration with the world economy. By 2001, the value of exports and imports combined accounted for nearly half of total spending in the economy, up from between 25 and 30 per cent in the early 1990s (Figure 2.3). Further, China was the world's sixth largest trader of goods, up from fifteenth in 1990 (World Trade Organization, 2002).¹²

Reflecting its strong export performance, China's current account has remained in surplus since 1993 (Appendix Table 2A.1). China's foreign reserves and to a lesser extent, its external debt position, also are strong, reducing the likelihood of an Asian-style crisis and increasing China's attractiveness as an investment destination.¹³

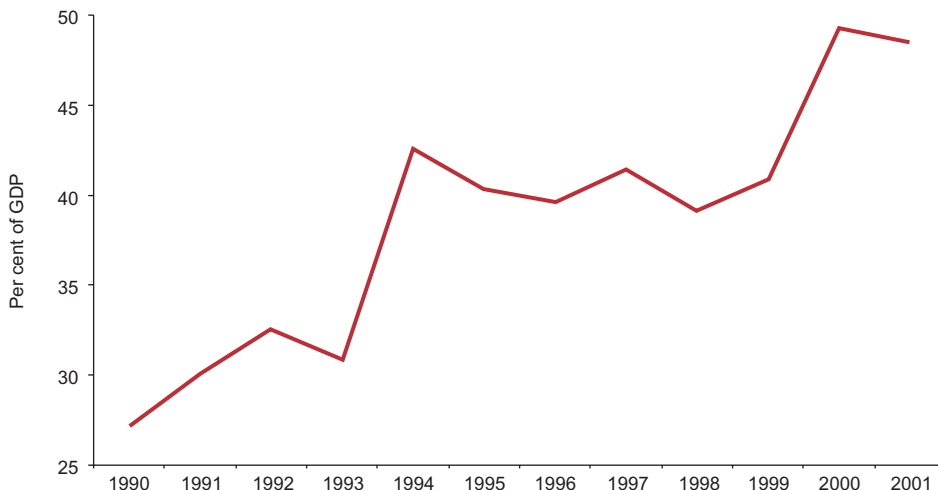
¹² Developed economies continue to be China's main trading partners; in 2001, the United States, Japan and the European Union together accounted for just under half of China's total merchandise trade. Other major trading partners include Hong Kong, the Republic of Korea, Taiwan and Singapore. Australia accounts for 1.8 per cent of China's total merchandise trade, a share it has held since 1999 (CEIC, 2002).

¹³ Reserves, at almost US\$250 billion in mid 2002, are now second only to Japan globally. While short term external debt is low, at US\$51 billion, 4 per cent of GDP, it increased sharply in 2001 due to new measurement standards authorities implemented and now constitutes about 30 per cent of total external debt, up from about 10 per cent in 2000 (CEIC, 2002). While still manageable in terms of debt servicing, such an increase needs to be monitored. China's capital account remains largely closed.

Figure 2.3

Exposure to Trade Growing Strongly

Value of China's Goods and Services Trade as Per cent of GDP, Annual, 1990-2001



Source: CEIC, 2002.

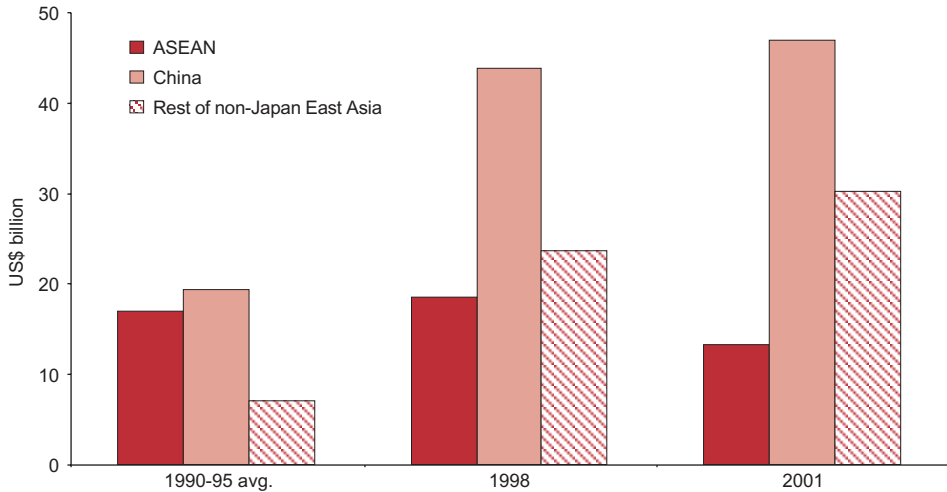
Foreign direct investment surging

China's attractiveness as a cost effective and efficient exporting base and its large domestic market have enabled it to attract more FDI than any other developing country and consistently be one of the two largest recipients worldwide (CEIC, 2002; United Nations Conference on Trade and Development, 2002).¹⁴ WTO entry and related structural reforms are increasing China's attractiveness. After several years of flat FDI inflows, in 2001, China received inflows worth US\$46.8 billion and in the nine months to September 2002, attracted almost US\$40 billion in new FDI, suggesting total inflows for the year could reach a record US\$50 billion (CEIC, 2002).

These trends make China the dominant recipient of FDI in non-Japan East Asia (Figure 2.4). By 2001, China received over 50 per cent of inward FDI flows to the region, while ASEAN received only 15 per cent (United Nations Conference and Trade and Development, 2002). This is a significant change from the first half of the 1990s, when China and ASEAN received roughly equal FDI inflows.

¹⁴ Since 1997, Hong Kong and Taiwan have supplied about 45 per cent of China's FDI, but inflows from the United States, 8.6 per cent, Japan, 7.3 per cent, the larger EU countries, 6.9 per cent, Singapore, 5.7 per cent and the Republic of Korea, 3.5 per cent, are increasingly important (CEIC, 2002).

Figure 2.4

China's Recent FDI Inflows Far Exceed Rest of East Asia's**Non-Japan East Asian Annual FDI Inflows, US\$ billion, 1990-2001**

Note: 'Rest of non-Japan East Asia' includes Republic of Korea, Hong Kong SAR and Taiwan.

Source: United Nations Conference on Trade and Development, 2002.

With its strong international reserves and need to secure resource supplies, China also increasingly invests abroad, although from a very small base. It expanded its overseas FDI stock to almost US\$4 billion by 2000 (CEIC, 2002).

LIFE IN CHINA IMPROVES

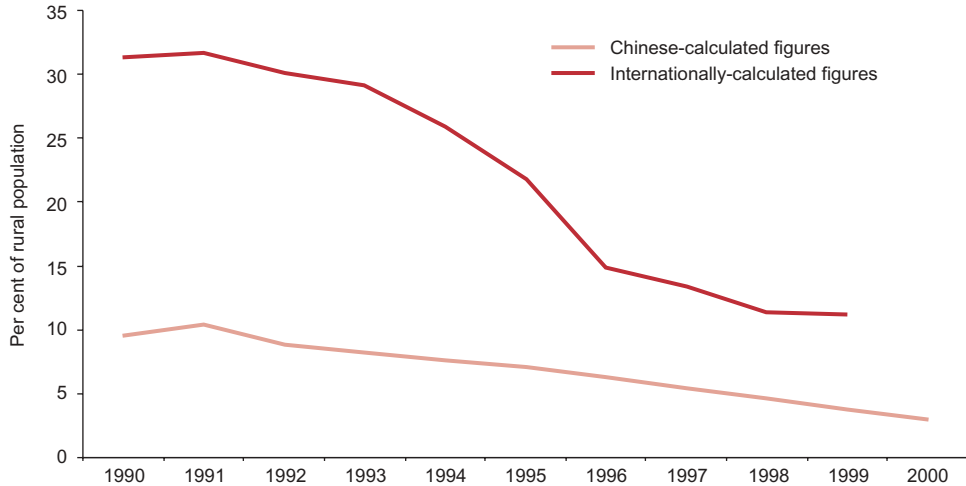
As a result of recent strong growth, living standards in China continue to improve. Since the mid 1990s, Chinese real incomes have risen 50 per cent, driving further falls in poverty (Figure 2.5) (International Monetary Fund, 2002a; World Bank, 2001, 2002).¹⁵ Nominal per capita incomes reached US\$911 in 2001, up from US\$578 in 1995 (Appendix Table 2A.1).

¹⁵ A recent study by the Asian Development Bank found that the urban poverty rate in China is between 4 and 6 per cent (China Economic Review, 2002).

Figure 2.5

Chinese Rural Poverty Continues to Fall

Proportion of Rural Population Living in Poverty, Chinese and International Figures, Per cent, 1990-2000



Notes: The Chinese-calculated poverty figures measure the proportion of the population whose per capita income falls below US\$0.66 per day, measured in 1985 constant prices. The internationally-calculated figures measure the proportion of the population whose per capita income falls below US\$1 per day, also measured in 1985 constant prices, as defined by the World Bank.

Sources: World Bank, 2001, 2002; Asian Development Bank, 2000, 2002a.

Strong income growth also is dramatically increasing people’s ownership of consumer durables, providing tangible evidence of how quickly living standards are improving (Table 2.1). The continuing rise of Chinese consumerism will remain a key trend facing exporters and investors, although with per capita incomes only US\$910 per person, Chinese average incomes still remain well below OECD averages.

Table 2.1

Durable Consumer Goods Ownership Booming**Number of Major Durable Consumer Goods per 100 Households, Urban and Rural, Selected Years**

<i>Urban population</i>				
Item	1985	1990	1995	2002 ^a
Washing machines	48	78	89	91
Refrigerators	7	42	66	87
Colour televisions	17	59	90	125
Cameras	9	19	31	44
Mobile phones	-	-	3 ^b	59
Computers	-	-	4 ^b	20
<i>Rural population</i>				
Item	1985	1990	1995	2002 ^a
Washing machines	2	9	17	29
Refrigerators	0	1	5	12
Colour televisions	1	5	17	49
Cameras	-	1	1	3
Mobile phones	-	-	-	4

Note: a June 2002.

b December 1998.

Sources: Chinese National Bureau of Statistics, 2000, 2001; CEIC, 2002.

SERIOUS CHALLENGES REMAIN

Despite its major economic achievements over the past 20 years, authorities must resolve serious policy challenges to sustain future growth and living standards. These challenges include the interrelated issues of financial system restructuring, deepening SOE reform and establishing a functioning social welfare system. Further macro reforms and leadership issues also may prove important.¹⁶

¹⁶ Implementing WTO commitments and dealing with the ongoing structural changes they will bring is another important challenge for China in the years ahead. For further details, see Chapter 1 - *Doing Business*.

Financial System Reform

Non performing loans a looming burden

Despite progress in forming asset management companies, disposing of non performing loans is proving slow and difficult.¹⁷ As asset management companies deal with their best assets first, final recovery rates are likely to be even lower than the current 22 cents in the dollar (Wang, H., 2002; National Australia Bank, 2002). Most analysts expect the Government eventually will have to cover a large portion of asset management companies' bad debts; even with a recovery rate of 30 per cent, this could cost almost RMB1 trillion (US\$120 billion) or 10 per cent of GDP.¹⁸

Moreover, state commercial banks still hold non performing loans made after 1995. Although official estimates currently put this figure at about 25 per cent of outstanding loans, other analysts estimate they could be as high as 35 to 60 per cent of GDP (People's Bank of China, 2002a; International Monetary Fund, 2002a; Lardy 2001).¹⁹ Taking responsibility for even 50 per cent of these bad debts would require the Government to inject a further RMB1.7 trillion (US\$200 billion) into the banking system to maintain solvency, equivalent to a further 17.5 per cent of GDP. Lower recovery rates would imply much higher fiscal costs. Together, resolving asset management companies' bad loans and remaining non performing loans will substantially increase Chinese government debt levels.

Bank reforms have further to run

Despite recent reform efforts, state owned banks still dominate the sector, general staff quality and internal control systems remain poor, branch networks are large and inefficient and staffing levels are too high. However, the biggest reform challenge remains lending to SOEs. While state banks now are expected to act on a commercial basis and are rapidly expanding their lending to the private sector and households from a low base, their core business remains funding the less efficient SOE sector.²⁰ Bank management still can be pressured to maintain credit lines to sensitive SOEs and current bankruptcy laws do not provide for a sound credit culture (Ikeya, 2002).

¹⁷ Disputed legal title and the court system can hinder asset recovery and creditor rights are not well protected. Many assets are overvalued on the books, management is generally poor and difficult to change and local governments can prove difficult to work with when trying to restructure or sell state owned enterprise assets (Wang, H., 2002; Mahon, 2002; Economist Intelligence Unit, 2002b). Foreign exchange controls also can hinder foreign investor interest (Economist Intelligence Unit, 2002b).

¹⁸ However, since asset management companies have ten years to resolve their non performing loans, the Government will have many years to write off this liability, reducing the immediate impact on the official balance sheet.

¹⁹ Prominent analysts note that when one of the major state banks, the Bank of China, re-assessed its assets using stricter criteria, its NPL ratio more than doubled to 39 per cent (Lardy, 2001). The Bank of China is typically regarded as the best of China's major state banks.

²⁰ State banks control about two thirds of lending and direct well over half of these loans to SOEs, although the latter now produce only about one third of industrial output (CEIC, 2002). Meanwhile, total lending to the private sector and individuals increased by 50 per cent *per annum* between 1996 and 2001, although it still only accounts for 1 per cent of outstanding loans (CEIC, 2002).

These issues limit bank independence, lower efficiency, entrench poor institutional structures and raise doubts that banks can prevent new non performing loans, as recognised by senior Chinese officials (Ikeya, 2002; *Wall Street Journal*, www.online.wsj.com, 7 October 2002). Further freeing state owned banks from pressure to lend to inefficient or failed SOEs remains a key challenge for the Chinese authorities; without this reform, fiscal pressures will continue to mount.

SOE Reform Challenges

Despite SOE reform progress, significant challenges remain. Large SOEs continue to dominate key sectors, particularly heavy industry and utilities, inhibiting private sector competition. Bankruptcy laws are weak. Many SOEs operate with significant overcapacity, leading to large stock build-ups and creating deflation.²¹ Corporate governance in many SOEs is inadequate, resulting in significant overstaffing and poor efficiency. The debt-for-equity swaps and other restructuring asset management companies have conducted in recent years to begin reforming SOE operation have met with only minimal success (*Wall Street Journal*, www.online.wsj.com, 7 October 2002). Despite profits improving in recent years, returns on equity are poor.

Without continued reform of the state owned sector, particularly through listing or full privatisation, the banking system is likely to continue accumulating non performing loans, inhibiting efficiency and longer term growth prospects. However, social welfare coverage is minimal, slowing the pace of restructuring. Due to unemployment and social stability concerns, many unviable SOEs continue to receive financial or policy support from local or central authorities, advantaging them against new private market entrants.

Social Security System Reform

Despite some encouraging policies implemented in recent years, government efforts at reforming the social security system are far from complete.²² Authorities often use current employer and employee contributions to cover large unfunded pension liabilities, particularly to SOE retirees and laid off workers, reducing schemes' credibility.²³ Pension schemes and unemployment insurance apply to few township and village enterprises and only a small share of the rural workforce. Outside more advanced cities like Shanghai, relatively low level administrators with weak technical skills oversee most pension schemes. Medical and other costs also are rising, limiting access for private employees and the unemployed.

²¹ However, in 2000 and 2001, recorded stock levels fell for the first time, suggesting reforms may be beginning to change SOE behaviour (CEIC, 2002).

²² Over the next 30 to 40 years, pensions alone represent a major liability of at least 75 per cent of GDP (Friedman et al, 1996; Wang, Y. et al, 2000).

²³ Some trials segregate individual contributions so they cannot be used to cover the cash-flow of existing retirees to overcome this problem, but this is not the general practice (World Bank, 2002).

Currently, China's relatively young age structure aids social welfare provision. However, from 2010 onwards, China's age dependency ratios will deteriorate sharply. If a sustainable pensions funding system is not in place and yielding significant returns to fund retirees by then, significantly higher taxes or lower pension payouts are likely if authorities are to prevent a sharp rise in government debt levels.²⁴ Successful reforms to unemployment and health insurance programs also are vital to assist SOE reform.

Future Macro Reform Challenges

Getting fiscal reform right matters to future corporate tax regimes and the ability to supply essential infrastructure and social services. Major issues include off-budget expenditures, increasing efficiency and equity in fiscal federalism and continuing to raise the government revenue share of GDP.²⁵ Analysts suggest Chinese authorities will need to start fiscal consolidation soon to avoid a rising debt burden, requiring greater effort in collecting revenue, controlling expenditure and improving transparency and revenue allocation at central and provincial levels.

Political Developments

As China begins the change to a new generation of political leaders, the relationship between politics and business will remain important. However, it is unlikely that the transition will alter dramatically the outlook of continued reform.

The Chinese Communist Party's Party Congress in November 2002 is likely to approve a new leadership and affirm its broad policy settings for the coming five years. The Party Congress also is likely to approve changes to the Party Constitution to enable the Party to address better the consequences of economic development and reform; for example, amendments to the Constitution should enable private entrepreneurs to join the Party for the first time. Such broadening of the Party's base should consolidate the already strong links between the Party and business.

China's leaders, present and incoming, know that economic growth is the key to their legitimacy and that growth requires continuing economic reform. Authorities will continue to find it necessary to encourage greater transparency, legal certainty and accountability to boost economic performance. Recent reforms, for example, in selecting and promoting Government and Party officials, reinforce these trends. Some slowing of the pace of reform is possible while authorities seek to address the potentially major social consequences of rapid reform of the rural economy and state owned enterprises, but reversal is very unlikely.

²⁴ For example, modelling conducted in the mid-1990s suggested that maintaining the current pay-as-you-go pension system would require a doubling of current payroll tax rates by 2030 to continue adequately funding pensions (Friedman et al, 1996). Already these taxes are high, reaching 50 per cent of payrolls in Shanghai (Wu, Y., 2002).

²⁵ In 2001, authorities began reforming management of funding between the centre and the provinces (Zhang, 2002). Also, income tax is only a very small proportion of total tax revenues.

CHINA'S ECONOMIC OUTLOOK

Looking ahead, WTO entry should reinforce economic reforms and deliver better market access, as well as contribute to economic restructuring. (See Chapter 1 – *Doing Business*.) While several major factors challenge this outlook, the experience of the past 25 years suggests Chinese authorities gradually but successfully will address these issues. As a result, China's economy should continue to grow strongly, delivering solid gains in real per capita income to its population and assuring foreign business of a rapidly expanding market.

Impacts of WTO Accession

Overall GDP impact

A wide variety of studies model the likely impact of accession on China, on average finding WTO entry should boost the level of China's real GDP by about 1-2 per cent in total over the next decade (Appendix Table 2.A2 provides examples).²⁶ However, most of these models are static and few allow for China's FDI liberalisation commitments, generally concentrating only on tariff reductions. Hence, they miss important impacts on investment decisions and broader productivity outcomes, particularly as FDI inflows increase and structural change progresses.²⁷ Economic Analytical Unit commissioned modelling for this report, incorporating investment liberalisation and productivity changes, forecasts that implementing the full WTO package could add over 1 percentage point to China's growth potential *per year* over the next ten years (Centre of Policy Studies, 2002).²⁸

WTO impact by sector

Entry into the WTO also will continue to reshape China's economic structure, particularly by further boosting the performance of manufacturing and services. Economic Analytical Unit commissioned modelling forecasts all economic major sectors will grow more quickly as a result of WTO entry, but manufacturing and services will experience the greatest gains (Figure 2.6, Appendix Table 2A.3).

²⁶ Estimates range from 0.62 per cent gain by 2010 to a 4.4 per cent gain over the longer term (Appendix Table 2A.2).

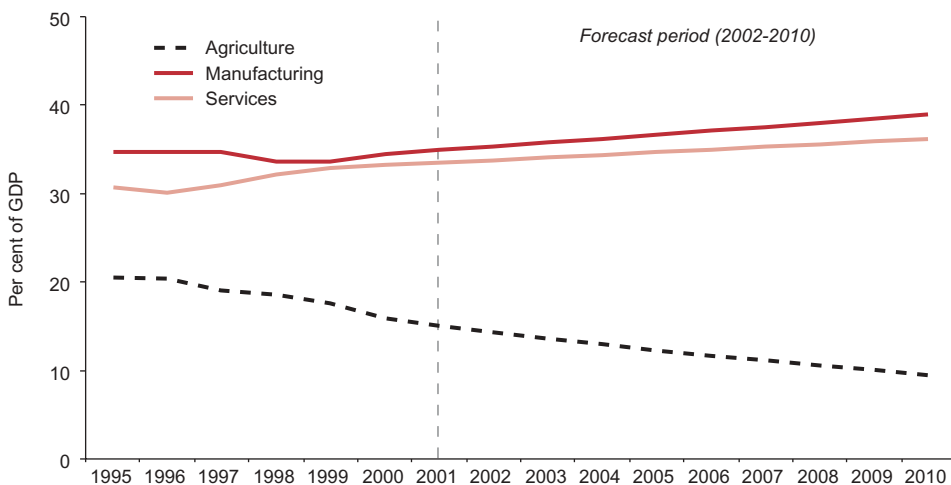
²⁷ Recent research suggests that FDI in China boosts productivity more than it boosts the level of domestic investment (International Monetary Fund, 2002b).

²⁸ The Appendix to this chapter gives a more detailed summary of the major findings of this and other modelling on the impact of WTO entry on China's growth.

Figure 2.6

Manufacturing and Services Shares Increasing

Actual and Forecast Sectoral Value Added Shares of GDP, Per cent, 1995-2010



Source: World Bank, 2002; Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

Individual sectors gaining most from WTO accession include formerly protected industries like wholesale and retail trade, motor vehicles and parts, insurance, iron and steel, non-ferrous metal products, communications, tourism and finance (Centre of Policy Studies, 2002). Other more liberalised sectors, particularly light manufacturing, will gain less since they already benefit from openness to trade and investment. Nevertheless, these sectors' performance will still improve thanks to further gains in productivity throughout the economy, particularly in critical areas like finance, infrastructure and distribution. Most agricultural sectors will benefit modestly, with their performance better than without WTO entry.²⁹

China's Growth Outlook

Over the next decade, three potential growth paths for China are credible. The pace and depth of future economic reform will determine the outcome.

- The most optimistic, high growth scenario would require the Government to push ahead strongly with economic reform and implementing WTO commitments, generating rapid restructuring that quickly moves resources from less to more competitive sectors. During the adjustment period from 2003 to 2005, China may experience lower real GDP growth of between 6.5 and 7 per cent as restructuring occurs and China's bloated inventories are drawn down. However, after 2005, such vigorous reform would boost efficiency and competitiveness, pushing GDP growth to an average of

²⁹ More details of these modelling results are available in Chapters 4-7 of his report, which deal with agriculture, minerals and energy, manufacturing and infrastructure, and services, respectively.

close to 8 per cent per annum between 2005 and 2011 (Figure 2.12). This scenario would see real GDP more than double by the start of the next decade, to reach almost US\$2.4 trillion in constant prices; real per capita income will exceed US\$1 750.

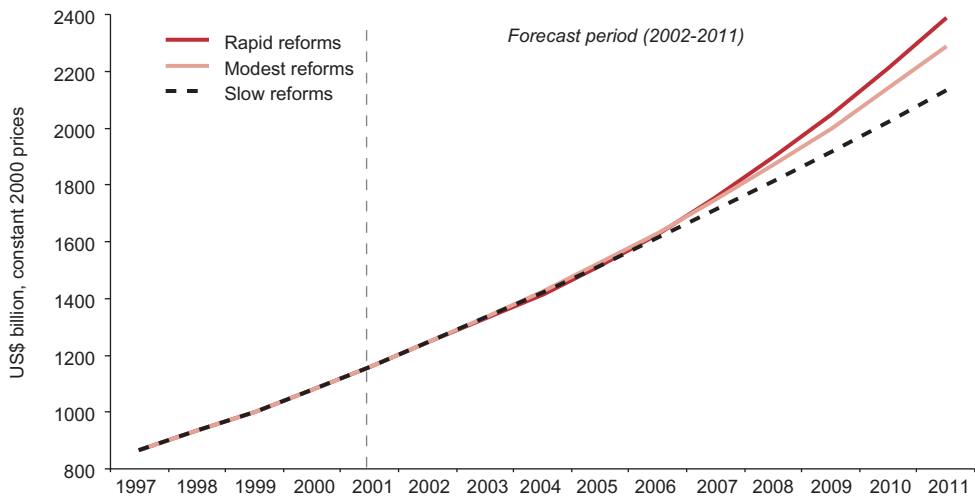
- A medium pace reform scenario is likely if the Government makes more modest policy progress on key challenges like finance, SOE reform and social welfare. This would avoid sharply rising economic and social burdens, but leave significant challenges in these sectors partially unresolved during the 2000s. Under this scenario, solid real GDP growth projections of about 7 per cent per year on average are likely, raising GDP to about US\$2.3 trillion by 2011. Chinese per capita income, in constant prices, would reach about US\$1 680 by 2010, compared to \$911 in 2001.
- A slower growth outcome is likely if authorities weaken their commitment to reform over the next three to five years. This would gradually undermine economic growth after 2005, as rising fiscal burdens begin to impact more heavily on competitiveness and social indicators. This would significantly depress annual growth in the latter half of the decade, to 5 to 6 per cent (Figure 2.7). In this case, real per capita incomes would only reach US\$1 565 by 2010.

On balance, the second, more modest reform and growth scenario appears the most likely. This best reflects China's previous policy approach of tempering economic policy progress to maintain social stability, particularly as a new leadership settles in and beds down WTO commitments. The least likely scenario is the third, slowing reform and gradual economic deterioration. However, given the scale of China's current policy challenges, it is not possible to rule out this scenario completely.

Figure 2.7

Rapid Reforms Boost Growth Potential

Alternative Medium Term Real GDP Growth Paths under Rapid, Modest and Slow Reform Scenarios, US\$ billion, Constant 2000 prices, 1997-2011



Sources: International Monetary Fund, 2002d; World Bank, 2002; Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

IMPLICATIONS

While China's business and policy environment are likely to remain challenging even after authorities implement WTO commitments, the most likely economic reform and growth scenario provides good prospects for expanding Australia-China commercial links and Australian business opportunities. For Australian business, China's projected 7 per cent average annual output growth over the next decade implies a significantly larger absolute expansion in commercial opportunities than those experienced over the last decade.

As a result, Australian trade volumes should continue to grow robustly as WTO commitments and sustained strong output performance steadily expand Chinese import demand. Renewed WTO related restructuring of agriculture, minerals, manufacturing and services, expanding foreign investment and higher local incomes should generate increased demand for competitive Australian goods and services exports. However, significant slippage on reforms required to resolve China's major economic challenges could undermine growth prospects and commercial opportunities.

REFERENCES

- Adhikari, R. and Y. Yang, 2002, 'China's Increasing Openness: Threat or Opportunity?', paper presented to ADB Trade Policy Issues Workshop Feb-Mar 2002, www.adb.org, accessed May 2002.
- Asian Development Bank, 2000, 'Country Economic Review – People's Republic of China', October 2000, www.adb.org, accessed September 2002.
- , 2001, 'Asian Development Outlook 2001 – People's Republic of China', www.adb.org, accessed May 2002.
- , 2002a, 'PRC's Economy Continues Robust Growth', 9 April 2002, www.adb.org, accessed September 2002.
- , 2002b, 'Asian Development Outlook 2002 – People's Republic of China', www.adb.org, accessed September 2002.
- Brooks, R., 2002, Economic Analytical Unit interview with Resident IMF Representative, Beijing, March.
- CEIC, 2002, CEIC database, Supplied by Econdata, Canberra, accessed October 2002.
- Centre of Policy Studies, 2002, Consultancy supplied by Centre of Policy Studies, July 2002.
- China Economic Review, 2002, 'Poverty found even in prosperous east', September 2002, Article supplied to Economic Analytical Unit, October 2002.
- Chinese National Bureau of Statistics, 1999, *Statistical Yearbook of China*, Beijing.
- , 2000, *Statistical Yearbook of China*, Beijing.
- , 2001, *Statistical Yearbook of China*, Beijing.
- East Asia Analytical Unit, 1997, *China Embraces the Market, Achievements, Prospects and Opportunities*, Department of Foreign Affairs and Trade, Canberra, April.
- , 1999, *Asia's Financial Markets, Capitalising on Reform*, Department of Foreign Affairs and Trade, Canberra, October.
- Economic Analytical Unit, 2002, *Changing Corporate Asia, What Business Needs to Know*, Department of Foreign Affairs and Trade, Canberra, March.
- Economist Intelligence Unit, 2001, 'China – Business - Industry Overview – Financial Services', 5 September 2001, www.viewswire.com, accessed September 2002.
- , 2002a, 'Higher Unemployment Figures', 26 April 2002, www.viewswire.com, accessed May 2002.
- , 2002b, 'Bad loans are no bargain', 21 June 2002, www.viewswire.com, accessed September 2002.
- , 2002c, 'Will SOEs be sold off', 12 July 2002, www.viewswire.com, accessed August 2002.

- Fan, M. and Y. Zheng, 2000, 'The Impact of China's Trade Liberalization for WTO Accession – A Computable General Equilibrium Analysis', paper presented at conference on 'China's Accession to the WTO: An Overview of Recent Analyses', October 2000, Chinese Academy of Social Sciences, Beijing.
- Friedman, B., E. James, C. Kane and M. Queisser, 1996, 'How Can China Provide Income Security for Its Rapidly Aging Population?', www.worldbank.org, accessed March 2002.
- Ianchovichina, E. and W. Martin, 2001, 'Trade Liberalization in China's Accession to the WTO', March 2001, Paper provided to Economic Analytical Unit.
- Ikeya, M., 2002, 'China – Unique Strengths and Weaknesses of Monetary Policy', Rating & Investment Information Inc. research note, Hong Kong, January 2002.
- International Finance Corporation, 2000, *China's Emerging Private Enterprises, Prospects for the New Century*, Washington, D.C., September.
- International Monetary Fund, 2000, *World Economic Outlook*, October 2000, www.imf.org, accessed May 2002.
- , 2001, *International Financial Statistics Yearbook*, Washington.
- , 2002a, *World Economic Outlook*, April 2002, www.imf.org, accessed May 2002.
- , 2002b, 'Foreign Direct Investment in China: what do we need to know?', 2 May 2002, www.imf.org, accessed September 2002.
- , 2002c, 'IMF Concludes 2002 Article IV consultation with People's Republic of China', 3 September 2002, www.imf.org, accessed September 2002.
- , 2002d, *World Economic Outlook* database, September 2002, www.imf.org, accessed October 2002.
- , 2002e, *International Financial Statistics Yearbook*, Washington, September.
- Japan Asia Securities, 2002, 'Bad debt ratio among China's banks drops', 19 July 2002, www.japanasia.com, accessed September 2002.
- Lardy, N., 1999, 'The Challenge of Bank Restructuring in China', Bank for International Settlements Policy Paper, www.bis.org, accessed May 2002.
- , 2001, 'China's Worsening Debts', 22 June 2001, Article published in *Financial Times*, www.brook.edu, accessed September 2002.
- , 2002, 'Will China Keep Growing', Article published in *Asian Wall Street Journal*, 14 June, ookings.edu/views/op-ed/lardy/20020614.htm www.brook.edu, accessed August 2002.
- Li, S. and Wang, 1998, 'The Global and Domestic Impact of China Joining the WTO', Paper produced by Ford Foundation China Economic Research Program in collaboration with the Development Research Center of the State Council, Washington.

- Li, X. and A. Lejour, 2000, 'The Sectoral Impact of China's Accession to the WTO – A Dynamic CGE Analysis', paper presented at conference on 'China's Accession to the WTO: An Overview of Recent Analyses', October 2000, Chinese Academy of Social Sciences, Beijing.
- Ma, G. and B.S.C. Fung, 2002, 'China's Asset Management Corporations', Bank for International Settlements Working Paper no. 115, August 2002, Supplied to Economic Analytical Unit by author.
- Mahon, D., 2002, Economic Analytical Unit interview with Managing Director and Chief Representative, CMG Mahon (China), March, Beijing.
- National Australia Bank, 2002, 'China Economic Comment – Banking Reform Upon WTO Accession', 4 February 2002.
- Nomura International, 2001, 'A journey of ten thousand miles...starts with a great leap into the WTO', December 2001, Hong Kong.
- Organisation for Economic Cooperation and Development, 2002, *China in the World Economy*, OECD Centre for Cooperation with Non-Members, Paris.
- Panitchpakdi, S. and M. Clifford, 2002, *China and the WTO*, John Wiley and Sons, Singapore.
- People's Bank of China, 2002a, 'AMCs made Remarkable Progress in NPL Disposal', 31 July 2002, www.pbc.gov.cn, accessed September 2002.
- , 2002b, 'Financial Industry Performed Well', 11 July 2002, www.pbc.gov.cn, accessed September 2002.
- Rawski, T., 2001, 'China's GDP Statistics – A Case of Caveat Lector', Downloaded from author's website at the University of Pittsburgh, www.pitt.edu, accessed September 2002.
- United Nations Conference on Trade and Development, 2002, *World Investment Report 2002*, www.unctad.org, September 2002, accessed October 2002.
- US Department of Agriculture, 2001, *China: Agriculture in Transition*, Economic Research Service, www.usda.gov, accessed April 2002.
- US International Trade Commission, 1999, 'Assessment of the Economic Effects on the United States of China's Accession to the WTO', September 2001, www.usitc.gov, accessed February 2002.
- Wang, H., 2002, Economic Analytical Unit interview with Executive Director, China Cinda Asset Management Corporation, March, Beijing.
- Wang, Z., 2002, Economic Analytical Unit interview with Director and Executive Vice President, Guangdong Development Bank, March, Guangzhou.
- World Bank, 1994, *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*, Oxford University Press.
- , 2000, 'Bankruptcy of State Enterprises in China – A Case and Agenda for Reforming the Insolvency System', September 2000, www.worldbank.org, accessed May 2002.

——, 2001, *China Overcoming Rural Poverty*, March 2001, www.worldbank.org, accessed April 2002.

——, 2002, 'China Economic Update', 9 April 2002, www.worldbank.org, accessed April 2002.

World Trade Organization, 2002, *Annual Report 2002*, Geneva, www.wto.org, accessed September 2002.

Wu, H., 2002, Economic Analytical Unit communication with Associate Professor in Economics, Department of Business Studies, Hong Kong Polytechnic University, August.

Wu, Y., 2002, Economic Analytical Unit interview with Deputy Director, Development Planning Commission of the Shanghai Municipal People's Government, Shanghai, March.

Zhai, F. and S. Li, 2000, 'The Implications of China's Accession to WTO on China's Economy', paper presented at conference on 'China's Accession to the WTO: An Overview of Recent Analyses', October 2000, Chinese Academy of Social Sciences, Beijing.

Zhang, J., 2002, Economic Analytical Unit interview with Deputy Director-General, Policy and Planning Department, Chinese Ministry of Finance, Beijing, March.

APPENDIX

Table 2A.1

China's Growth, Fiscal, Inflation and External Outcomes Encouraging China's Major Economic Indicators, 1990, 1995 and 2001^a

	1990	1995	2001
Nominal GDP (US\$ billion)	388	700	1159
Nominal GDP per capita (US\$)	339	578	911
Real GDP (average annual growth)^b	7.9	12.0	8.1
Real GDP per capita (average annual growth)^b	6.2	10.7	7.1
Shares of GDP (per cent)			
<i>By economic sector</i>			
Agriculture	27.0	20.5	15.2
Industry	41.6	48.8	51.1
Construction	4.6	6.5	6.7
Services	31.3	30.7	33.6
<i>By expenditure category</i>			
Household consumption	49.7	46.1	47.1
Government consumption	12.3	11.4	13.5
Fixed investment	25.8	34.7	37.7
Goods and Services Exports	15.0	21.0	25.4
Goods and Services Imports	12.2	19.3	23.0
Other Indicators			
Retail price inflation (per cent) ^b	10.1	11.4	-0.2
Fiscal balance (per cent of GDP)	-0.8	-1.0	-2.5
Outstanding Government debt (per cent of GDP)	-	-	18 ^c
Foreign reserves (US\$ billion) ^d	30	75	216
Current account balance (per cent of GDP)	3.1	0.9	1.5
Short-term foreign debt (US\$ billion) ^e	6.8	11.9	50.6
FDI inflows (US\$ billion)	3.5	37.5	46.8

Notes: a All figures are for the year nominated unless otherwise stated.

b Figures are for averages over periods 1985-1990, 1990-1995 and 1995-2001, respectively.

c End-2000.

d End year.

e The sharp jump in short term foreign debt is due to re-classification of debt holdings by Chinese authorities in early 2001. Measured foreign debt now includes foreign debt of foreign banks in China, offshore deposits of Chinese financial institutions and trade financing debt, which were not included in earlier periods.

Sources: CEIC, 2002; International Monetary Fund, 2000, 2001, 2002a; 2002e.

Results of Other China WTO Entry Modelling

All quantitative research conducted on China’s accession to WTO has found that in the medium to longer term, accession will bring positive benefits for Chinese output. However, the methods and results of this modelling vary significantly (Table 2A.2). As a rough approximation, most models suggest that WTO entry will expand the level of Chinese real GDP by about 1-2 per cent over the medium term (5 to 10 years).

Table 2.A.2

WTO Will Boost Growth Potential

Increment to Real GDP Relative to Baseline over the Medium Term, Selected Studies

Study	Year conducted	Method	Results
Modelled as change to annual GDP growth rate			
Li and Wang	1998	Unspecified	1 percentage point gain in annual real GDP growth from 1997 to 2010
International Monetary Fund	2000	Unspecified	-0.3 percentage point fall in real GDP growth in first year of accession, then real GDP growth gains of 0.1 percentage point, 0.6 percentage point, 0.6 percentage point and 0.8 percentage point in the second, third, fourth and fifth years respectively following accession
Nomura International	2001	Unspecified	0.5 percentage point gain in annual real GDP growth over 5 years to 2006
Modelled as change to GDP level			
Fan and Zheng	2000	Comparative static CGE modelling; tariff liberalisation only	0.62 per cent gain in real GDP level by 2010
Li and Lejour	2000	CGE modelling, tariff liberalisations only	0.8 per cent gain in real GDP level by 2010
Zhai and Li	2000	CGE modelling, tariff liberalisations only	1.5 per cent gain in real GDP level by 2005
Ianchovichina and Martin	2001	CGE modelling (GTAP); tariff liberalisation only, with duty exemptions incorporated	2.2 per cent gain in level of real income over period 1995 to 2005
Adhikari and Yang	2002	(unspecified)	4.2 per cent gain in level of real GDP by 2020
US International Trade Commission	1999	(unspecified)	4.4 per cent gain in real GDP over undefined longer term

Sources: Various, refer to references.

Results of Modelling Commissioned for This Report

According to China's WTO commitments, the authorities must open many 'strategic' sectors, particularly in heavy industry and services, to foreign investors in the years ahead. This reform, combined with other WTO induced legal and regulatory reforms, should encourage a new surge of FDI into China. China's entry into the WTO will thus reduce the importance of state owned enterprises in key manufacturing and service industries, encouraging increasingly market oriented decision making, boosting productivity, growth and living standards.

Thus, in addition to measuring the likely impact of tariff reductions, the other key to analysing the impact of WTO entry is to assess the impact of the potential FDI surge, especially into 'strategic' manufacturing and services industries and the benefits this will bring. Already, FDI inflows have picked up in 2001 and the early part of 2002, after stagnating since the Asian crisis (CEIC, 2002). Modelling conducted for this report therefore simulates the effects of an increase in investment, including FDI, following reforms required by China's entry to WTO.³⁰ This growth in FDI is expected to have the effect of improving productivity growth, with particularly strong changes occurring to productivity gains in the liberalising 'strategic' sectors.

Table 2A.3 summarises the modelled macroeconomic and major sectoral effects of China's entry to the WTO. The first column shows China's projected growth over the next ten years if it did not enter the WTO. Column Two shows how the growth trend is altered by entering WTO and liberalising 'strategic' industries. For example, the average annual growth rate of real GDP is likely to be just over 1 percentage point higher during each of the ten years following China's entry to the WTO. This implies China's real GDP will be worth almost US\$2.5 billion by 2010 (Columns Three and Four). The results also show WTO entry will lead to continuing change in the economic structure in favour of manufacturing and services industries.

³⁰ The modelling also incorporates China tariff cut commitments.

Table 2A.3

The Effects of China's Entry to the WTO

China's Macroeconomic Aggregates Value Added, Growth Rate and Level, Per cent and US\$ billion, 2000-2010

	Average annual value added growth rates without WTO entry 2000-2010	Change in annual growth rates due to WTO entry 2000-2010	Absolute level of value added without WTO entry in 2010 US\$ billion, 2000 prices	Change in absolute level of value added due to WTO entry in 2010 US\$ billion, 2000 prices
	per cent	percentage points		
Real GDP	7.6	1.1	2246.2	240.7
By expenditure component				
Consumption	6.0	1.1	908.0	97.0
Investment	10.3	1.2	1072.6	123.9
Exports	10.4	1.2	849.4	95.5
Imports	11.0	1.3	629.9	75.5
By sector				
Agriculture	3.0	0.3	230.7	6.2
Mining	6.0	0.8	53.5	4.2
Manufacturing	8.7	1.4	934.4	123.3
Services	8.3	1.4	794.8	105.2

- Note: a Sectors do not sum to GDP as some smaller components of GDP are not included.
 b The first column shows projected growth in the nominated sector over the next ten years if China did not enter the WTO.
 c The second column shows how the growth trend is predicted to be altered as a result of China entering the WTO. For example, the average annual growth rate of GDP is likely to be 1.1 percentage points higher during each of the ten years following China's entry to the WTO.
 d The third column shows the forecast size of the nominated sector in constant US\$ billion in 2010 if China did not enter the WTO.
 e The fourth column shows the forecast gain in size of the nominated sector in constant US\$ billion in 2010 as a result of China entering the WTO. For example, GDP is forecast to be US\$240.7 billion higher in 2010 than if China had not entered the WTO.

Source: Centre of Policy Studies, 2002; World Bank, 2002; Economic Analytical Unit calculations.

THE AUSTRALIA-CHINA COMMERCIAL RELATIONSHIP

KEY POINTS

- The Australia-China commercial relationship is dynamic and growing in step with China's rapid development. Over the 1990s, China's manufacturing success particularly benefited Australia's resource exporters, boosting trade significantly.
- Australia's successful 2002 bid to supply Guangdong with LNG demonstrates the competitiveness of Australia's resource exporters in the China market and the closeness of the economic and political relationship.
- As China's production and incomes expand and its economy opens further following WTO entry, the commercial relationship with Australia should evolve rapidly to include a broader range of Australian manufactured and service exports and higher two-way foreign direct investment, FDI, in more sectors.
- Over the medium term, Chinese agricultural restructuring should increase export opportunities for Australian broad acre agriculture. Resource and energy exports should continue to grow strongly to fuel China's industrial expansion. Consumer and producer input markets for Australian manufactures should grow. Australian services exporters should build on finance, education, tourism and professional services' success.
- The close complementarity of the two economies means Australia's FDI in China is relatively small. However, WTO entry and China's continued rapid restructuring should provide more direct investment opportunities in food and minerals processing, infrastructure support, and services including finance, environment and professional services. Australian FDI should expand rapidly if China liberalises and further reforms its mining regime.
- China exports large amounts of manufactures to Australia and Australia is a popular Chinese investment destination, particularly for large resource projects.

COMMERCIAL RELATIONS BOOMING

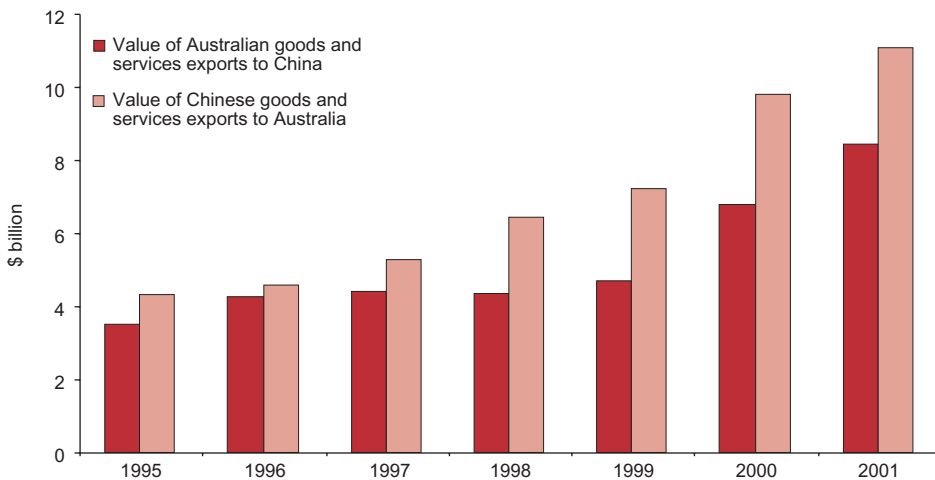
Australia's dynamic commercial relationship with China, based predominantly on trade, boomed over the last decade. Australian exports to China grew very rapidly, in line with China's strong growth and industrialisation; this relationship is likely to grow and broaden over the coming decade, with Australian exports widening to include more manufactured goods and services. Australian FDI, while much smaller, also is likely to increase, especially in the liberalising services sector. Chinese exports to Australia also are growing strongly and Chinese investment in Australia, particularly in resource projects, continues to grow.

In 2001, two-way merchandise trade reached almost \$18 billion, with two-way services trade adding another \$1.6 billion; overall, this represents a doubling of trade since 1997 and highlights the close complementarity of the two economies (Figure 3.1).

Figure 3.1

Australia-China Trade Booming

Annual Value of Goods and Services Trade, \$ billion, 1995-2001



Note: The Australian Bureau of Statistics has not released by-country travel services data since late 2000 due to visa processing changes. Tourism, education and business travel services trade figures for 2001 are consequently estimated using historical growth rates for 1997-2000 period.

Source: Department of Foreign Affairs and Trade, 2002; Economic Analytical Unit calculations.

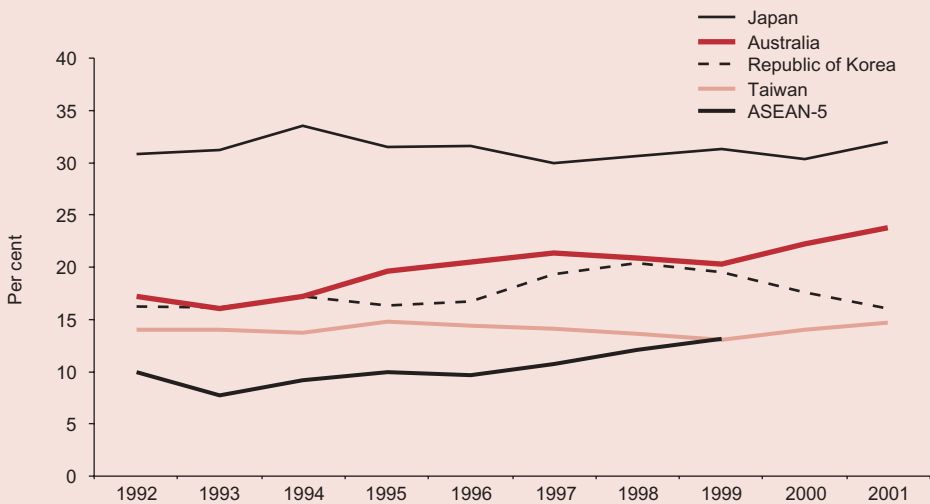
AUSTRALIA AND CHINA - A PERFECT MATCH?

The Australian and Chinese economies are strongly matched; Australia mainly exports primary commodities and small amounts of higher value manufactures and services to China while China mainly exports labour intensive manufactured products to Australia. Detailed analysis of trade between China and its major regional trading partners indicates that, after its relationship with Japan, the trade relationship with Australia is the next most complementary and this match is increasing (Figure 3.2).

Figure 3.2

Australia-China Relationship Increasingly Complementary

Proportion of Trade Structure Complementary to China's, Per cent, 1992-2001



Notes: a This graph shows similarity indexes, which plot the complementarity, or degree of matching, between two economies' trading patterns. For example, if two economies export similar goods, they are more likely to be competitors than natural trading partners, resulting in a lower reading on the graph above. However, if the exports of one economy are similar to the imports of the other economy, and vice versa, then the two economies are better matched.

b ASEAN-5 comprises Singapore, Indonesia, Thailand, Malaysia and Philippines.

Source: Economic Analytical Unit, 2002, forthcoming.

Looking ahead, strong economic growth in both countries, closely complementary trade structures and increasing openness to the global economy will provide further two way trade opportunities.

DIFFERING TRADE FIGURES

Australian trade data show that Australia consistently runs a merchandise trade deficit with China. Conversely, Chinese trade figures show that China has a consistent deficit with Australia. For example, in 2001, Australian official statistics show merchandise exports of \$7.6 billion to China, merchandise imports of \$10.3 billion and a trade deficit of \$2.7 billion (Department of Foreign Affairs and Trade, 2002). However, Chinese statistics recorded \$10.6 billion worth of imports from Australia, \$7 billion worth of exports and a merchandise trade deficit for China of \$3.6 billion (CEIC, 2002).

It appears that this discrepancy can largely be traced to the role of Hong Kong as an intermediary in trade between the two countries. Australian exports to China that go through Hong Kong are recorded as exports to Hong Kong by Australian Customs, but are recorded as imports from Australia by Chinese Customs. The reverse happens with China's exports to Australia, with Chinese authorities recording many exports ultimately bound for Australia as exports to Hong Kong. Hence, it is possible two way merchandise trade is higher than either economy records it, at around \$20 billion, and is roughly balanced.

In investment, while the relationship is much less developed, interest is increasing. WTO will broaden access to Chinese industry; in particular, freer services sectors should attract increasing Australian investment into China. As China continues to grow and restructure, it also will look to secure more primary resources offshore; Australia already is a very popular destination for Chinese outward investment.

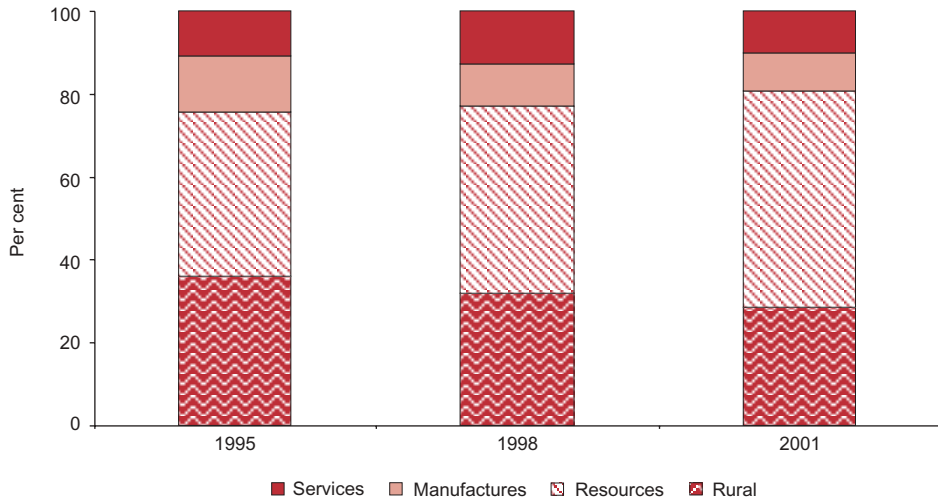
AUSTRALIA'S EXPORTS TO CHINA

The rapid growth in China's highly successful manufacturing sector continues to generate huge opportunities for Australian exporters. Between 1995 and 2001, strong Chinese business and consumer demand increased total Australian exports to China at an annual average rate of 16 per cent; between 1998 and 2001, merchandise exports doubled, from \$3.8 billion to \$7.6 billion. Merchandise exports to China now represent 6 per cent of Australia's overseas sales and make China Australia's fourth largest merchandise export market.¹

In 2001, rural and resource commodities, mainly supplying the Chinese manufacturing sector, accounted for just over 80 per cent of the value of Australian goods and services exports to China (Figure 3.3).

¹ Chinese data indicate Australia exported a much higher \$10.3 billion of merchandise goods to China in 2001 (CEIC, 2002). Most of the discrepancy can be traced to Hong Kong's role as a trading intermediary between the two countries.

Figure 3.3

Primary Commodities Dominate Exports to China**Shares of Major Australian Export Categories to China, Per cent, 1995, 1998 and 2001**

Note: The Australian Bureau of Statistics has not released by-country travel services data since late 2000 due to visa processing changes. Tourism, education and business travel services trade figures for 2001 consequently are estimated using historical growth rates for 1997-2000 period.

Source: Department of Foreign Affairs and Trade, 2002; Economic Analytical Unit calculations.

TRADEDATA INTERNATIONAL

Melbourne-based TradeData International Pty Ltd provides specialist expertise on market trends and prices of internationally traded products. Using up-to-date data for thousands of products across a wide range of countries, TradeData produces reports on price, major movements in trade volume, entry of significant new competition, shifts in market share, price repositioning of major suppliers, changes in seasonality and direction of trade. Analysis of this market intelligence then provides a solid basis to make informed decisions on export options and opportunities.

Data available for China is particularly detailed, even for individual regions within China. Regular clients include some of Australia's major companies and government departments as well as a wide range of smaller companies with specialist marketing requirements.

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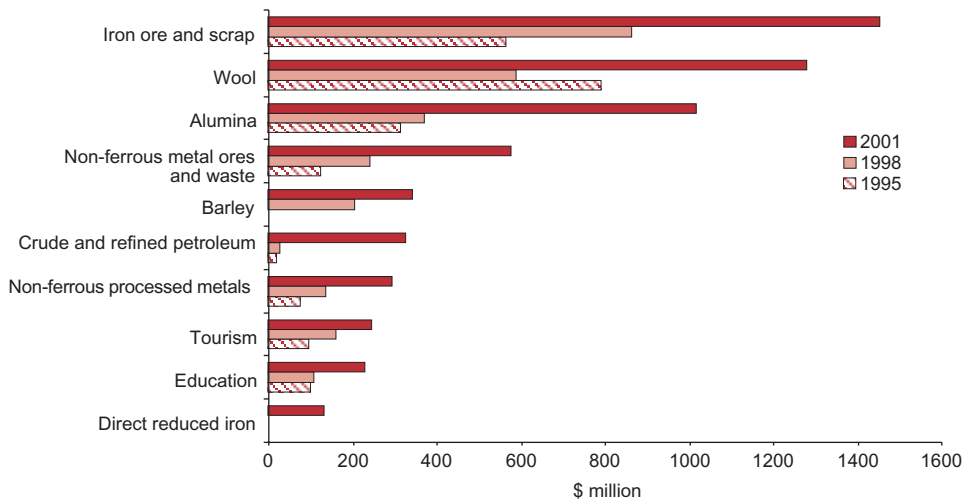
Source: TradeData International, 2002.

By contrast, Australian manufactures and services exports are relatively small compared to primary commodities trade, each making up about 9-10 per cent of total exports. However, as China's middle class grows and the economy liberalises, elaborately transformed manufactures and advanced services exports should expand; education and tourism already are among the top ten exports (Figure 3.4).

Figure 3.4

Top Ten Exports to China Growing Rapidly

Annual Value of Major Australian Exports to China, \$ million, 1995, 1998 and 2001



Note: a Due to confidentiality restrictions, alumina and recent barley export figures are obtained from the World Trade Atlas database, which uses Chinese customs data.
 b 2001 figures for tourism and education exports are estimated using historical growth rates for 1997-2000 period. However, unreleased data suggests that education exports to China may have surged to over \$400 million in 2001, driven by very strong growth in Chinese student numbers (Department of Education, Science and Training, 2002).
 Source: Department of Foreign Affairs and Trade, 2002; World Trade Atlas, 2002; Department of Education, Science and Training, 2002; Economic Analytical Unit calculations.

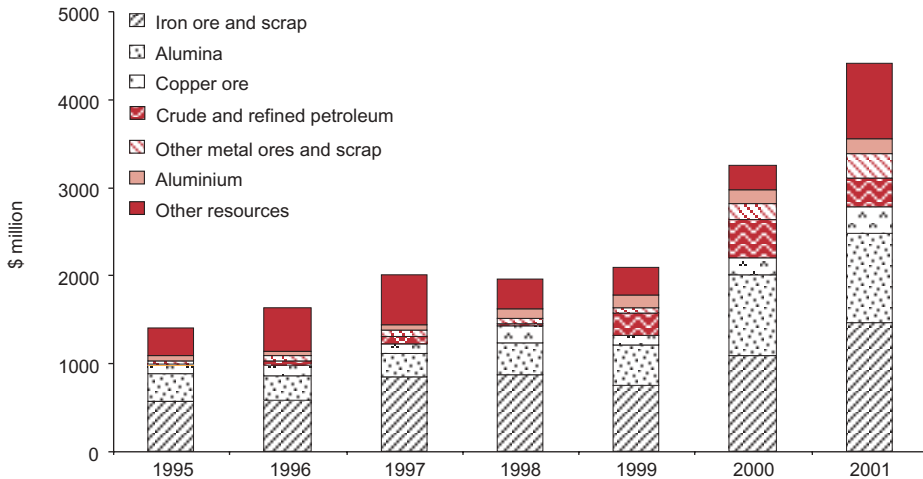
Minerals and Energy

Mineral and energy commodities have benefited most from China's rapid industrialisation to become Australia's largest single export group to China, accounting for 52 per cent of exports in 2001. Between 1999 and 2001 alone, these exports more than doubled in value to \$4.4 billion. China now is Australia's third largest customer for resource products after Japan and the Republic of Korea.

Iron ore is Australia's biggest single resource export to China and alone was worth over \$1.4 billion in 2001 (Figure 3.5).² Alumina is the other major resource export, surging to just over \$1 billion in 2001 (World Trade Atlas, 2002).³

² China is Australia's second largest customer for iron ore after Japan, taking more than 26 per cent of our iron ore exports by value in 2001 (Department of Foreign Affairs and Trade, 2002).
³ Australia accounts for over 75 per cent of Chinese alumina imports by volume in 2001. This represents around a quarter of total Australian alumina exports by volume (Department of Foreign Affairs and Trade, 2002).

Figure 3.5

Iron Ore and Alumina Exports To China Booming**Annual Value of Major Australian Resource Exports to China, \$ million, 1995-2001**

Note: Due to confidentiality restrictions, alumina export figures are obtained from the World Trade Atlas database.

Source: Department of Foreign Affairs and Trade, 2002; World Trade Atlas, 2002.

China is one of Australia's largest customers for copper ores and concentrates; in 2001, it purchased 36 per cent of Australian copper ore exports, valued at over \$300 million. This makes Australia the second largest supplier of copper ores to China after Chile (World Trade Atlas, 2002).⁴ Looking ahead, China's continued rapid industrialisation, small per-capita mineral supplies and ongoing industrial restructuring should further boost opportunities for Australian exporters of resource commodities. (See Chapter 5 – *Mineral and Energy Opportunities*.)

Rural Exports

A large population relative to available arable land means China increasingly may source high quality broad acre agricultural commodities from Australia and other foreign suppliers. Since the mid 1990s, Chinese authorities continued opening and restructuring domestic agricultural markets, further encouraging farmers to move away from land intensive crops and products in which Australia is competitive and into higher value added, more labour intensive agricultural products in which China is more competitive. (See Chapter 4 – *Agriculture and Agribusiness*.)

⁴ Other major Australian mineral and energy exports to China include crude and refined petroleum, processed aluminium, liquefied propane and butane, coking coal and other metal ores.

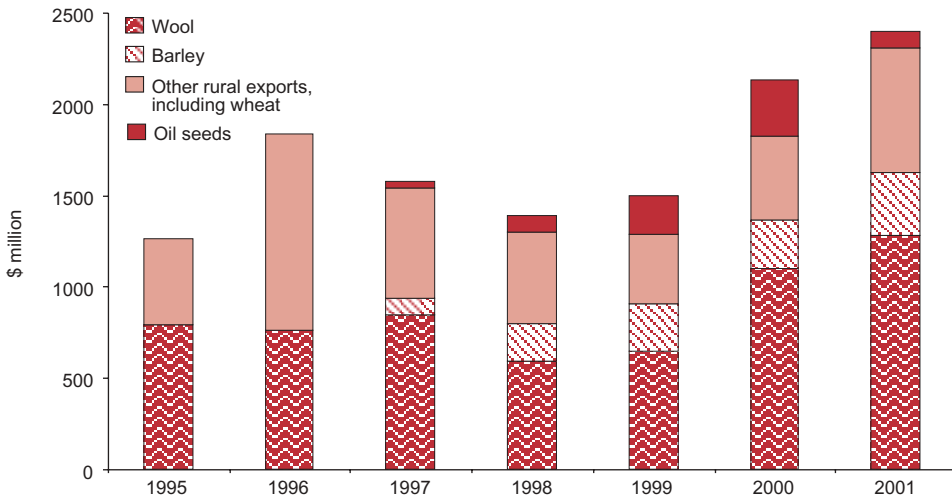
China’s manufacturing boom boosted Australia’s wool exports, our largest rural export to China (Figure 3.6). In 2001, at almost \$1.3 billion, wool sales to China represented one third of Australia’s annual wool exports and easily made China Australia’s largest wool market. This wool supplies China’s highly successful apparel industry which currently accounts for about 20 per cent of global clothing exports and is set to grow with WTO entry (World Trade Organization, 2001; Ianchovichina et al., 2001). Since 1995, strong wool exports have driven 11 per cent average annual rural export growth to China, which reached \$2.4 billion in 2001 (Department of Foreign Affairs and Trade, 2002).

China also is a major market for other Australian broad acre crops including malting barley and canola seeds. Australian barley mainly supplies China’s brewing industry; China’s largest beer producer and exporter, Tsingtao, is a consistent purchaser of high-quality Australian malting barley. Australian canola seed exports supply China’s rapidly expanding edible oil and food manufacturing markets.⁵ (See Chapter 4 – *Agriculture and Agribusiness*.)

Figure 3.6

Wool Dominates Rural Exports to China

Annual Value of Major Australian Rural Exports to China, \$ million, 1995-2001



Note: Due to confidentiality restrictions, recent barley export figures are obtained from the World Trade Atlas database, which uses Chinese Customs data.

Source: Department of Foreign Affairs and Trade, 2002; World Trade Atlas, 2002.

⁵ China also imports significant quantities of Australian wheat when China’s harvests fall short of requirements, although this has not happened since the mid 1990s.

Manufactured Exports

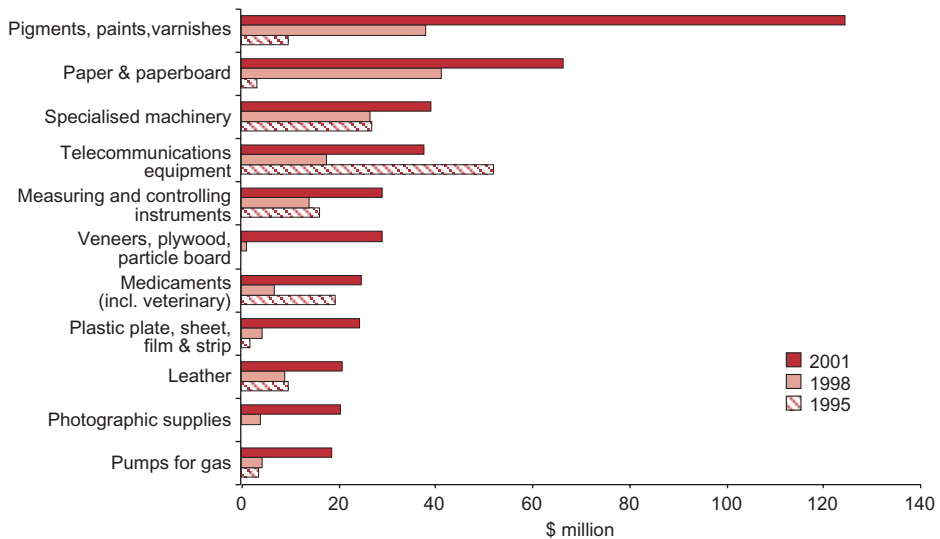
Australian manufacturing exporters mainly supply China's businesses rather than consumers, thus benefiting from China's strong manufacturing growth. Major manufactured exports include pigments, paint and varnishes, paper and paperboard, specialised machinery, measuring and controlling instruments, telecommunications products and medicaments. Other smaller manufactured export categories, including photographic supplies, computer parts, gas pumps and various types of electrical machinery, grew solidly in the later 1990s, driving manufactured export growth of almost 9 per cent per annum between 1995 and 2001 (Figure 3.7).

Looking ahead, rising consumer incomes and increased pressures for business efficiency should expand opportunities for a broader range of higher value Australian manufactured exports. (See Chapter 6 – *Manufacturing and Infrastructure*.)

Figure 3.7

Manufactured Exports to China Growing Solidly

Annual Value of Major Australian Manufactured Exports to China, \$ million, 1995, 1998 and 2001



Source: Department of Foreign Affairs and Trade, 2002.

Services

Education and tourism dominate Australia’s service exports to China, in 2000-01 accounting for 53 per cent of services exports (Figure 3.8). As China liberalises and develops its services sector, other services exports, including financial, environmental and business services will expand; already these are growing quickly, but from a relatively low base.

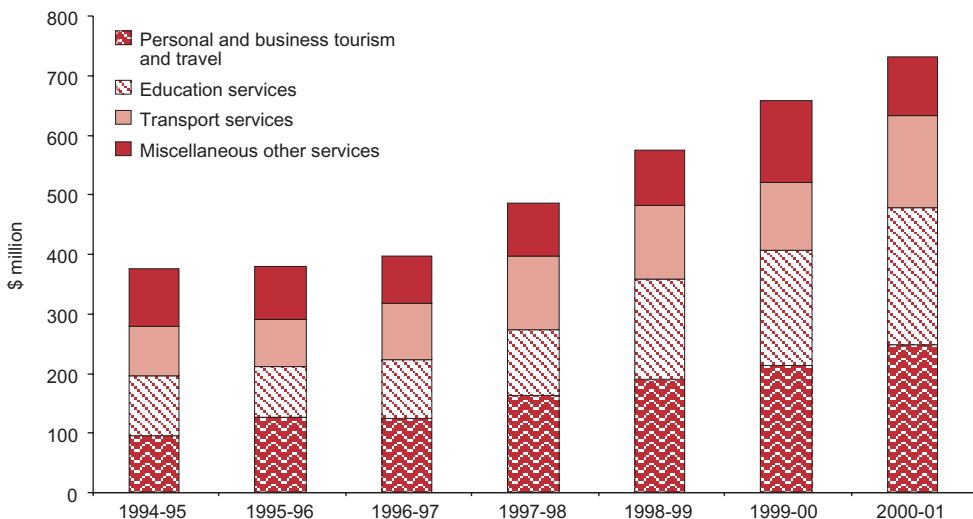
Since the late 1990s, the number of Chinese students studying in Australia has grown dramatically. Student numbers almost tripled between 1998 and 2000 to reach just under 15 000, making China Australia’s fifth largest source of international students (Australian Education International, 2002). However, unreleased data suggests that onshore Chinese student numbers may have doubled again by 2002, to around 30 000 (Department of Education, Science and Training, 2002). This would make China our number one source of overseas students. (See Chapter 7 – Services.)

Since 1995, Chinese tourism to all destinations has grown strongly, with Australia one of the major destinations outside East Asia (*Far Eastern Economic Review*, www.feer.com, 7 March 2002). China now is Australia’s seventh largest source of short-term visitors, with over 170 000 Chinese visitors arriving in Australia in 2001, up from only 43 000 in 1995 (Boote, 2002; Australian Bureau of Statistics, 2002b). Figures from the first half 2002 suggest this strong growth is continuing (Australian Bureau of Statistics, 2002b). (See Chapter 7 – Services.)

Figure 3.8

Education and Tourism Exports Taking Off

Annual Value of Major Australian Services Exports to China, \$ million, 1994-95 to 2000-01



Note: Tourism, business travel and education services trade figures for 2000-2001 are estimated using historical growth rates for 1997-2000 period. However, unreleased data suggests that education exports to China may have surged to around \$350 million in 2000-01, driven by very strong growth in Chinese student numbers (Department of Education, Science and Training, 2002).

Source: Australian Bureau of Statistics, 2002a; Department of Education, Science and Training, 2002; Economic Analytical Unit calculations.

Mainly due to small and medium Australian service suppliers' success in the increasingly demanding and rapidly growing services market, other services exports also are growing strongly. Sectors where Australian suppliers are present include financial services and other specialised areas like environmental, mining consulting, design, architectural, legal and telecommunications services. (See Chapter 5 – *Minerals and Energy* and Chapter 7 – *Services*.)

AUSTRALIA'S INVESTMENT IN CHINA

Over the long run, foreign investment may constitute an increasingly important part of the China-Australia business relationship, but at present two way FDI is reasonably modest. The relatively low level of Australian direct investment in China may reflect the complementary, rather than competitive, nature of Australia and China's production patterns and resource endowments; relatively few Australian and Chinese sectors have natural synergies, which may discourage investment. In those sectors where synergies do exist and Chinese enterprises could benefit from Australian expertise, including mining, financial services and broad acre agribusiness, Chinese authorities have limited foreign investment. Finally, the complex, highly competitive and challenging Chinese business environment can discourage all but the best prepared Australian firms with the soundest business plans. (See Chapter 1 – *Doing Business*.)

By mid-2001, Australia's stock of FDI in China reached \$1.9 billion, representing only 0.5 per cent of total Australian investment offshore and only 0.3 per cent of global foreign direct investment in China (Australian Bureau of Statistics, 2002; CEIC, 2002). However, this is more than double the \$900 million Australian companies had invested in China in the mid 1990s. Moreover, official Chinese data, which may be more comprehensive, indicates significantly higher levels of Australian investment into China, with the 2001 stock totalling almost \$4 billion (Figure 3.9).⁶

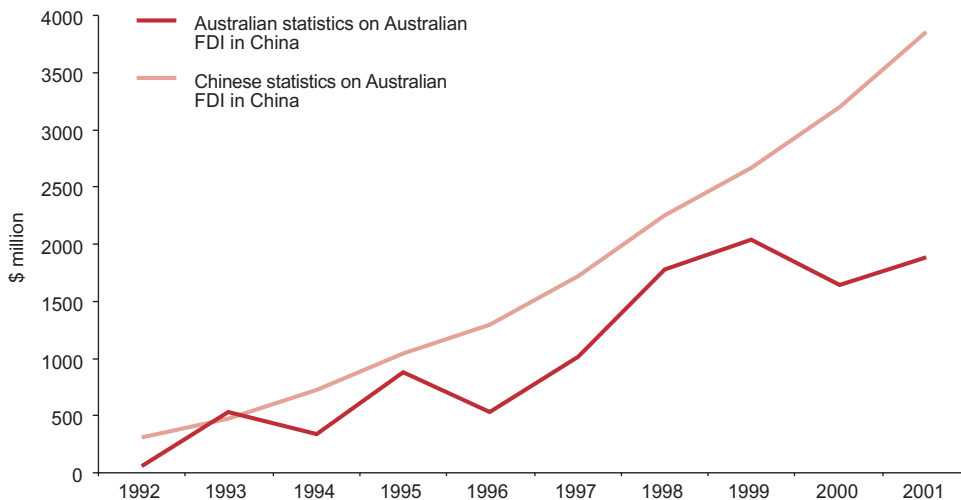
While big investors remain prominent in Australian investment flows to China, many small and medium sized firms now are investing and the mix of Australian investors in China has broadened away from manufacturing in recent years. A recent survey of Australian companies operating in China showed business numbers were reasonably evenly-split between three areas; manufacturing; property and business services; and a diverse range of 'other sectors' including wholesale and retail trade, mining, finance and insurance, construction, education, information services and energy supply (Maitland et al., 1999).

⁶ Australian Bureau of Statistics FDI data are sample based and hence can miss some FDI projects, particularly at the smaller end of the scale. Also, they only measure Australian FDI sourced in Australia, not investment sourced or routed via third countries, or reinvested profits in the host country. Hence, they represent a lower bound of actual FDI. Chinese data may have less of these shortcomings, although these data do not account explicitly for depreciation and investment withdrawals.

Figure 3.9

Australian Investment in China Expanding Solidly

Annual Stock of Australian Investment in China, Australian and Chinese Data, \$ million, 1992-2001



Note: a Chinese-sourced FDI data, originally from the Chinese National Bureau of Statistics, is approximated by the cumulative sum of foreign investment inflows from Australia between 1985 to 2001. This assumes any net inflows prior to 1985 would be off-set by post 1985 withdrawals, depreciation and other value changes, providing a rough approximation of total stock.

b Data for Australia is for fiscal years 1991-92 to 2000-2001.

Source: Australian Bureau of Statistics, 2002c; CEIC, 2002.

AUSTRALIAN INVESTMENT IN CHINA

Australian companies have invested successfully in many sectors including:

- agribusiness and food – Goodman Fielder
- minerals and energy – Sino Gold, Western Mining Corporation
- manufacturing – BHP Steel, CEM International, CSR, Air International
- financial services – Macquarie Bank, ANZ, CMG (part of the Commonwealth Bank)
- other services – News Corporation, Blake Dawson Waldron, Deacons, Allens Arthur Robinson, Hunt and Hunt, Woodhead International, Mayne Group, MDA Australia

Over the long run, services increasingly will drive Chinese economic growth, increasing the scope for Australian foreign investment in the sector. WTO accession and on-going reforms also eventually should reduce several constraints listed above, encouraging an expansion of Australian investor interest in China. However, the operating environment for business will remain highly competitive and challenging, requiring potential Australian investors to prepare their entry to China carefully.

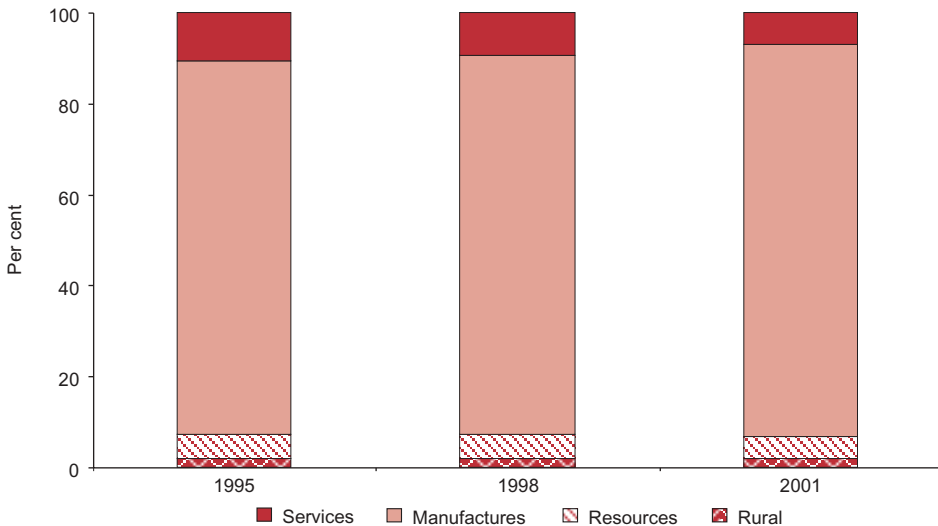
CHINA'S EXPORTS TO AUSTRALIA

Since 1995, China's exports to Australia grew a rapid 17 per cent per year, over twice as fast as total Australian imports grew during this period. China is Australia's third largest merchandise import supplier and in the first half of 2002, Australia was China's eleventh largest merchandise export market (Department of Foreign Affairs and Trade, 2002; CEIC, 2002). In 2001, as well as merchandise exports of \$10.3 billion, China exported services worth about \$770 million to Australia.⁷ Manufactured goods dominate Chinese exports to Australia, totalling \$9.7 billion or 86 per cent of exports and this share is growing (Figure 3.10).

Figure 3.10

Manufactures Dominate China's Exports to Australia

Shares of Major Chinese Export Categories to Australia, Per cent, 1995, 1998 and 2001



Note: The Australian Bureau of Statistics has not released by-country travel services data since late 2000 due to visa processing changes. Tourism, education and business travel services trade figures for 2001 are estimated using historical growth rates for 1997-2000 period.

Source: Department of Foreign Affairs and Trade, 2002; Economic Analytical Unit calculations.

⁷ Due to data limitations, this figure for 2001 services exports is estimated using historical growth rates for 1997-2000 period.

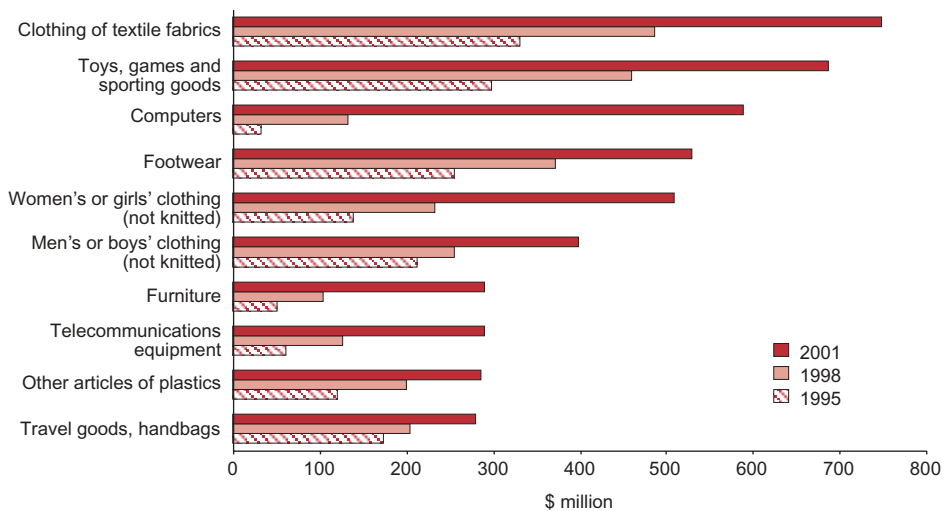
Manufactured Goods

China's manufactured exports to Australia increasingly are higher value added products. While traditional manufactured exports like textiles, clothing, footwear and toys continue to grow solidly and still account for a significant share of exports, higher value added products like computers and telecommunications equipment are growing even more rapidly (Figure 3.11). Other fast growing manufactured exports to Australia include electrical machinery, sound and video recorders, televisions, household electrical appliances and heating and cooling equipment.⁸ While much of China's input into these higher value added manufactures consists of labour intensive assembly skills, less technologically advanced components also increasingly are produced in China.

Figure 3.11

Chinese Manufactures Moving up the Value Chain

Annual Value of Major Chinese Manufactured Exports to Australia, \$ million, 1995, 1998 and 2001



Source: Department of Foreign Affairs and Trade, 2002.

⁸ For example, China has a 12 per cent share of Australia's imports of televisions, a 17 per cent share of imported videos, a 25 per cent share of imported radios and stereos, a 31 per cent share of imported vacuums and a 45 per cent share of imported food appliances (Department of Foreign Affairs and Trade, 2002).

CHINA MOVING UP THE VALUE CHAIN

Until recently, China predominantly produced and exported simpler labour-intensive manufactured goods, including cotton textiles, clothing, footwear, toys and sporting and travel goods. While it retains its position as a significant global supplier of these goods, since 1995, China's production and export share of information communication and technology, ICT, products and a wide variety of household electrical goods has increased significantly. For example, China supplied 4.6 per cent of global computer and office machine exports in 2000, up from only 2.4 per cent in 1995. It also is a major global producer of air conditioners, televisions and washing machines; some analysts suggest China produces 20 per cent of global whitegoods.

Leading this expansion into more elaborately transformed manufactured goods are a number of large and increasingly successful Chinese corporations. In IT products, the state-controlled Legend Group now holds almost 30 per cent of the rapidly growing Chinese personal computer market and is Asia's biggest computer manufacturer outside Japan. Shenzhen-based communications products group Huawei Technologies is one of the largest global producers of telecommunications switching products and is rapidly expanding its international presence. Whitegoods manufacturer Haier is building a strong niche presence in the United States refrigerator market.

Strong direct investment by multinationals also is driving China's growing market presence in these products. Many multinational manufacturers of higher value products, including JVC, LG, Panasonic, Sony and Samsung are shifting a significant part of their production to China and exporting from there. Generally, Chinese subsidiaries assemble finished products from largely imported parts for export to third markets.

Sources: Economic Analytical Unit, 2002, forthcoming; World Trade Organization, 2001; Akira, 2002; *Business Week*, www.businessweek.com, 18 June 2001; Economist Intelligence Unit, 2002; company websites.

Primary Commodities

China exports relatively few agricultural or resource commodities to Australia (Figure 3.10). Agricultural and food exports, including tobacco, confectionery, fruit juices and fresh and preserved vegetables, rose from a low base of \$85 million in 1995 to \$225 million in 2001 (Department of Foreign Affairs and Trade, 2002). Resource exports, predominantly crude and refined petroleum and simply processed aluminium, reached \$375 million in 2001.

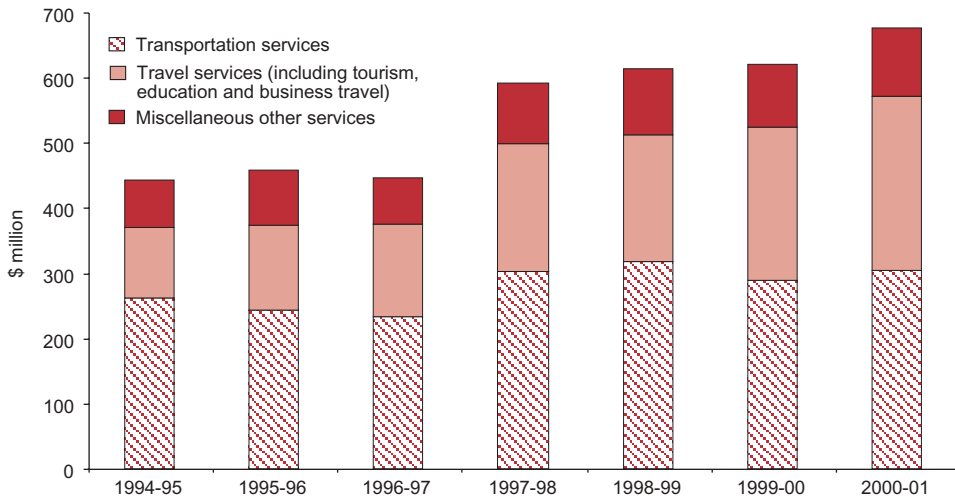
Services

In 2000-01, transportation and travel services accounted for almost 85 per cent of China's rapidly growing services exports to Australia (Figure 3.12). Rapidly growing transport and travel services exports reflect strong Australian tourism growth to China; between 1994-95 and 1999-2000, the number of short-term Australian visitors to China grew by over 12 per cent per annum, over twice as fast as the overall 5.5 per cent rate of expansion in total Australian tourists going abroad (Australian Bureau of Statistics, 2002b).

Figure 3.12

Transport and Travel Dominate

Annual Value of Major Chinese Service Exports to Australia, \$ million, 1994-95 to 2000-01



Note: Tourism and business travel services trade figures for 2000-2001 are estimated using historical growth rates for 1997-2000 period.

Source: Australian Bureau of Statistics, 2002a; Economic Analytical Unit calculations.

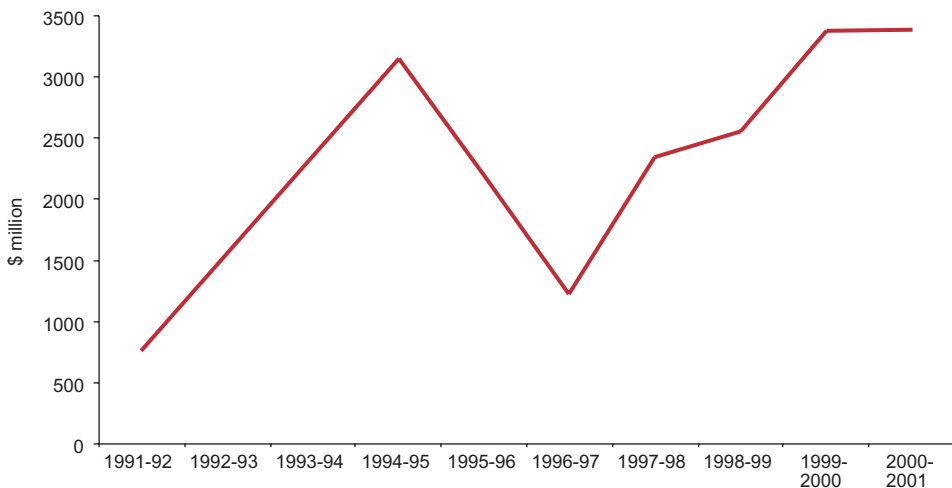
CHINA'S INVESTMENT IN AUSTRALIA

According to official Chinese statistics, Australia is one of the most popular destinations for approved Chinese investment abroad (Editorial Board of the Almanac of China's Foreign Economic Relations and Trade, 2001). Australian official data suggests Chinese organisations and individuals invested over \$3.3 billion in Australia up to mid 2001, spread across a variety of sectors (Figure 3.13) (Australian Bureau of Statistics, 2002a; Invest Australia, 2002).

Figure 3.13

Chinese Investment in Australia Growing Strongly

Stock of Chinese Investment in Australia, \$ million, 1991-92 to 2000-01



Note: Observations were estimated for the years where data are not available.

Source: Australian Bureau of Statistics, 2002c; Economic Analytical Unit calculations.

China's largest and highest profile Australian investments are in the resources sector.⁹ Real estate, including hotels in major metropolitan centres, farming and agricultural processing ventures and a variety of general manufacturing plants are other destinations for Chinese investment in Australia (Invest Australia, 2002).

⁹ China also has been securing significant shares in other resource projects across the globe. For example, China purchased a Peruvian iron ore company in 1992 and has entered joint venture agreements to secure iron ore supply from Brazilian mining giant CVRD and Indian producer MMTC, purchased base metal mines in Zambia and other parts of Africa, purchased a 50 per cent share in an Iraqi oil field in 1997 and in January 2002, the China National Offshore Oil Corporation, CNOOC, agreed to purchase Repsol-YPF's Indonesian oil and gas assets for US\$585m, making it the largest offshore producer in the Indonesian upstream oil and gas sector (Humphreys, 2002; China Economic Review, 2002; *Asian Wall Street Journal*, www.online.wsj.com, 11 September 2002; *Far Eastern Economic Review*, www.feer.com, 28 March 2002).

CHINA INVESTS TO SECURE UPSTREAM RESOURCES

China has invested in a broad range of Australian sectors since the mid 1980s, although its earliest and largest investments continue to be in resources. As was the case with Japanese and Republic of Korean firms which invested in these sectors from the 1960s to the 1990s, China's growing interest in these sectors in recent years reflects a desire to secure the resources needed to fuel its industrial expansion.

China's first major investment in Australia was in the mid 1980s, when China International Trust and Investment Corporation, CITIC, Australia, purchased a 10 per cent share in the Portland aluminium smelter in Victoria. In 1998, CITIC Australia acquired a further 12.5 per cent of this operation.

In the late 1980s, Hamersley Iron, a subsidiary of Rio Tinto, entered into a 60-40 joint venture with China Iron and Steel Trade and Industry Group Corporation to develop the large Channar iron ore mine in Western Australia. Under the terms of the contract, Channar currently supplies 10 million tonnes of blended ore per annum to the joint venture partners.

In 1997, CITIC Australia acquired 10 per cent of the Coppabella coal mine in Queensland, with an annual production capacity of over 3 million tonnes of pulverised coal injection products. CITIC Australia also holds a 50 per cent share in the C&S mineral exploration joint venture in Queensland.

In early 2002, Chinese steel producer Shougang agreed to purchase a 5 per cent share in Rio Tinto's planned HiSmelt direct reduced iron smelter in West Australia.

In mid 2002, Hamersley Iron finalised an agreement with China's largest steel maker, Shanghai Baosteel Group Corporation, Baosteel, to form an iron ore joint venture operation in Western Australia. Under the \$124 million agreement, Hamersley will develop a new mine in the Pilbara region to supply Baosteel with an average of 10 million tonnes of iron ore per year over the joint venture's 20 year life. Baosteel will hold a 46 per cent equity share of the venture and Hamersley the remaining 54 per cent.

Australia's recent successful tender for the Guangdong LNG contract also involves the Chinese partner, the China National Offshore Oil Corporation, taking an equity stake in its share of North West Shelf gas reserves.

Sources: CITIC Australia, 2002; Hamersley Iron, 2002a; HiSmelt, 2002.

Premier Zhu Rongji's recent 'going out' policy produced a surge of new Chinese outward investment in resources important for China's resource security (*Far Eastern Economic Review*, 28 March 2002, p.30). As WTO and other market opening reforms progress, state owned and private Chinese businesses will invest more abroad. Australia's rich raw material and agricultural endowments and proven resource and service industry capability should continue to attract strong inflows of Chinese investment.

SUMMARY AND PROSPECTS

Based on a strongly complementary trading relationship, the Australia-China commercial relationship is very robust and growing quickly. Primary commodities dominate Australian exports, with China demanding increasing amounts of resource commodities and wool to fuel its industrial expansion. In turn, China exports manufactures to Australia. Although the investment relationship is less developed, two-way flows are expanding steadily, boosted by Chinese resources investment.

In future, WTO entry and other reforms should encourage further opening and restructuring of the economy. Strong personal income growth and increased access through lower trade barriers will boost opportunities for Australian agribusiness producers, particularly in broad acre crops and high quality foodstuffs. Opportunities also may open for increased direct investment in agribusiness, although this will be limited to food processing ventures in the short term. (See Chapter 4 – *Agriculture and Agribusiness*.) WTO entry will further increase opportunities for Australian firms to supply high quality resource commodities to China's fast-growing industries. Mining investment opportunities will be limited until a more encouraging and certain policy regime is in place, but minerals processing and oil and gas investment look more promising. (See Chapter 5 – *Minerals and Energy*.)

Australian manufacturing exporters and investors will find increasing opportunities as Chinese businesses look to upgrade quality and technology and trade barriers fall further, although low consumer purchasing power will limit market opportunities for higher value consumer products. (See Chapter 5 – *Manufacturing and Infrastructure*.) China's burgeoning demand for a wide variety of business and consumer services also should offer significant business opportunities for Australian service suppliers, particularly as WTO entry encourages opening of previously restricted services markets. Australian companies already are present in a variety of fields like finance, education, tourism, mining, environment and professional services. As Chinese domestic industries continue to open, grow, upgrade and restructure, they will require expertise in a wide variety of fields; Australia's service suppliers are well able to compete in these markets. (See Chapter 7 – *Services*.)

TOWARDS AN AUSTRALIA-CHINA TRADE AND INVESTMENT FRAMEWORK AGREEMENT

In May 2002, in Beijing, Prime Minister John Howard announced that he and Premier Zhu Rongji had agreed to start work on a new framework agreement to enhance the economic and trade relationship between Australia and China.

That announcement begins a process which aims to strengthen the bilateral trade and investment relationship, building on the opportunities flowing from China's accession to the WTO, and marks in a practical way the thirtieth anniversary of relations between Australia and China.

Australia has proposed that the framework agreement comprise a number of elements, including:

- Specific measures to encourage deeper business linkages and to promote improved access arrangements in sectors of outstanding potential including energy and resources, agriculture and food, financial and social services;
- Arrangements to enhance high-level dialogue and to increase contacts across the board, with the aim of generating a closer partnership between Australia and China on issues of mutual interest in the bilateral, regional and multilateral trade policy sphere; and
- Measures aimed at creating an environment conducive to the ongoing liberalisation of trade and investment flows between the two countries.

Senior officials opened formal negotiations on the framework agreement in September 2002 in Beijing and further sessions are scheduled through 2003.

Both governments have commenced work on a joint study which will continue in parallel with the negotiations. The joint study is expected to identify evolving economic complementarities as well as policy and regulatory developments that will be relevant to the trade and investment relationship and to, therefore, serve as a reference point for a number of aspects of the negotiations.

REFERENCES

- Akira, K., 2002, 'China, Factory of the World', *Japan Echo*, Volume 23, Number 1, February.
- Australian Bureau of Statistics, 2002a, *Balance of Payments, Australia: Regional series*, ABS cat. No. 5338.0, Canberra, June.
- , 2002b, *Overseas Arrivals and Departures*, ABS Cat. No. 3401.0, August.
- , 2002c, *International Investment Position Australia: Supplementary Country Statistics*, ABS cat. No. 5352.0, Canberra, June.
- Australian Education International, 2002, 'Overseas Student Statistics 2000 – Summary of Key Points', www.aei.dest.gov.au, accessed April 2002.
- Boote, B., 2002, Economic Analytical Unit interview with Business Development Manager - Eastern Hemisphere, Australian Tourist Commission, Sydney, February.
- CEIC, 2002, CEIC database, Supplied by Econdata, Canberra, accessed October 2002.
- China-Australia Chamber of Commerce, 2002, Information supplied to the Economic Analytical Unit, Beijing, March.
- China Economic Review, 2002, 'China Economic Review', Volume 12, Number 3, Beijing, April.
- CITIC Australia, 2002, Information from company website, www.citic.com.au, accessed October 2002.
- Department of Education, Science and Training, 2002, Unpublished DEST student data estimates supplied to the Economic Analytical Unit, Canberra, October.
- Department of Foreign Affairs and Trade, 2002, STARS database, accessed September 2002.
- East Asia Analytical Unit, 1997, *China Embraces the Market, Achievements, Constraints and Opportunities*, Department of Foreign Affairs and Trade, Canberra.
- Economic Analytical Unit, 2002, forthcoming, *East Asia Restructures* (working title), Department of Foreign Affairs and Trade, Canberra.
- Economist Intelligence Unit, 2002, 'China produces 20 per cent of white goods in world', 17 September 2002, www.viewswire.com, accessed September 2002.
- Editorial Board of the Almanac of China's Foreign Economic Relations and Trade, 2001, *2001 Almanac of China's Foreign Economic Relations and Trade*, China Foreign Economic Relations and Trade Publishing House, Beijing, July.
- Hammersley Iron, 2002, Information from company website, www.hamersleyiron.com, accessed September 2002.
- HiSmelt, 2002, Information from company website, www.hismelt.com.au, accessed September 2002.

Humphreys, D., 2002, 'China Mining and Metals: The Waking Giant', Paper presented by Rio Tinto Chief Economist to Canadian Institute of Mining and Metallurgy's Annual General Meeting, 30 April 2002, www.riotinto.com, accessed July 2002.

Ianchovichina, E. and W. Martin, 2001, 'Trade Liberalization in China's Accession to the WTO', March 2001, paper provided to Economic Analytical Unit.

Invest Australia, 2002, Information supplied to Economic Analytical Unit, Hong Kong, April.

Maitland, E. and S. Nicholas, 1999, 'Australian Multinational Enterprises in China: Motivations, Technology Transfer and Operations', Australian Centre for International Business, University of Melbourne, Melbourne.

World Trade Atlas, 2002, *Global Trade Information Service* database, accessed September 2002.

World Trade Organization, 2001, *International Trade Statistics 2001*, www.wto.org, accessed May 2002.

OPPORTUNITIES IN AGRICULTURE AND AGRIBUSINESS

KEY POINTS

- China's large agricultural sector is becoming increasingly market oriented and exposed to international trade; it continues to move away from producing grain staples and other land intensive crops towards higher value, labour intensive products. WTO entry will reinforce this trend.
- Reflecting Australia's strong competitiveness in broad acre agriculture, wool and some grain crops should continue to dominate Australia's rural exports to China; WTO entry should encourage gradually improving access for these commodities. Australian dairy farmers and higher value food producers may benefit from expanding opportunities as incomes rise and tariffs fall further.
- Also, ongoing agricultural restructuring should boost demand for Australian agricultural services and technologies that increase infrastructure quality, address environmental degradation and assist Chinese producers improve productivity.
- China continues to gradually relax restrictions on foreign agribusiness investment, boosting investor interest. However, restrictions on land purchases and allowable agricultural investment largely still limit investment opportunities to food processing ventures and some higher value added agricultural projects.

Ongoing agricultural reforms gradually are shifting Chinese agriculture closer to its comparative advantage in labour intensive agriculture and away from land intensive activities in which Australia is more competitive. China is now the world's ninth largest exporter of agricultural and food commodities, mainly labour intensive, higher value added products and the eighth most important agricultural importer, mainly of lower value, land intensive products (World Trade Organization, 2001a; World Trade Atlas, 2002). Although 25 years of agricultural reform have helped prepare local farmers for WTO entry, authorities recognise they must accelerate reforms in many areas if producers are to prosper in more open agricultural markets.¹

MAJOR AGRICULTURAL TRENDS

China is the world's second largest agricultural producer after the United States and the largest producer of wheat, rice, fruit, vegetables, duck, mutton and lamb, pork, eggs and many aquaculture and seafood products (Australian Bureau of Agricultural and Resource Economics, 2001; Food and Agriculture Organization, 2002). Its total agricultural value added increased by almost 4 per cent per year over the 1990s to reach US\$176 billion in 2001, equivalent to just over 15 per cent of GDP (CEIC, 2002). China's 334 million farmers represent just over 45 per cent of the workforce (CEIC, 2002).²

Agricultural Restructuring Continues

Agricultural production continues to shift towards more labour intensive, higher value added agricultural products, reflecting China's comparative advantage and farmers' increasing capacity to respond to market prices. Since the mid 1990s, the share of land used for more profitable labour intensive agricultural sectors continued to expand at the expense of less profitable land intensive activities (Figure 4.1).³ This trend should help boost farm earnings, potentially slowing the divergence of urban and rural incomes.

¹ Developments in Chinese agriculture up to the mid 1990s are discussed in the Economic Analytical Unit's previous report on China, *China Embraces the Market, Achievements, Constraints and Opportunities* (East Asia Analytical Unit, 1997).

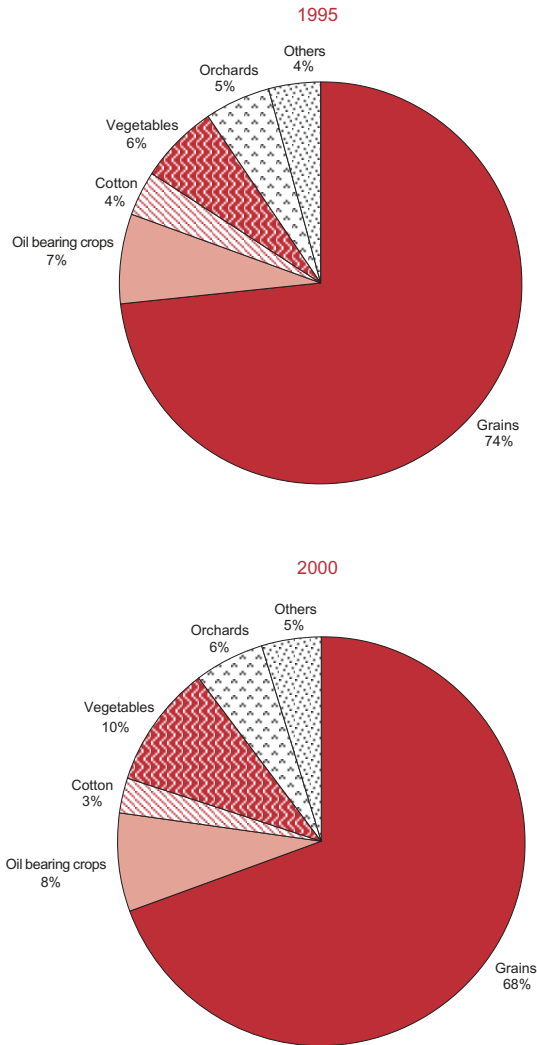
² However, many of these farmers are now part time, taking seasonal or casual jobs in towns and returning to the farm at planting and harvest time.

³ Revenue per acre from labour intensive products like fruit and vegetable production is up to 11 times higher than from land intensive crops (Table 9.3, East Asia Analytical Unit, 1997). Since land, rather than labour, is in short supply, farmers have preferred to move into such products wherever possible; recent trends allowing more local decision making reinforces farmers' movement into higher value crops, including those suitable for export (*Far Eastern Economic Review*, www.feer.com, 5 September 2002).

Figure 4.1

Grain's Share of Area Planted Continues Falling

Share of Planted Area Devoted to Grain and Selected Other Crops, Per cent, 1995 and 2000



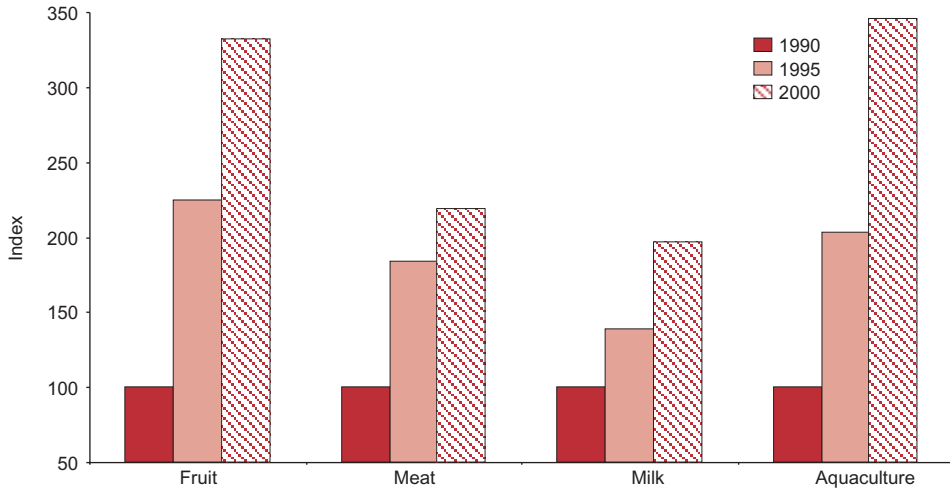
Sources: Chinese National Bureau of Statistics, 2001; CEIC, 2002.

Also, labour intensive non-crop rural production is booming; animal husbandry and fishery activities now account for over 40 per cent of gross agricultural output value (Chinese National Bureau of Statistics, 2001). In particular, output of meat, milk and aquaculture products grew strongly in the late 1990s (Figure 4.2). On the other hand, between 1995 and the early 2000s, production of many major land intensive crops, including rice, wheat and corn, stagnated or fell (Figure 4.3).

Figure 4.2

Labour Intensive Agriculture Booming

Output of Labour Intensive Agricultural Products, Tonnes, Index, 1990=100, 1990, 1995 and 2000

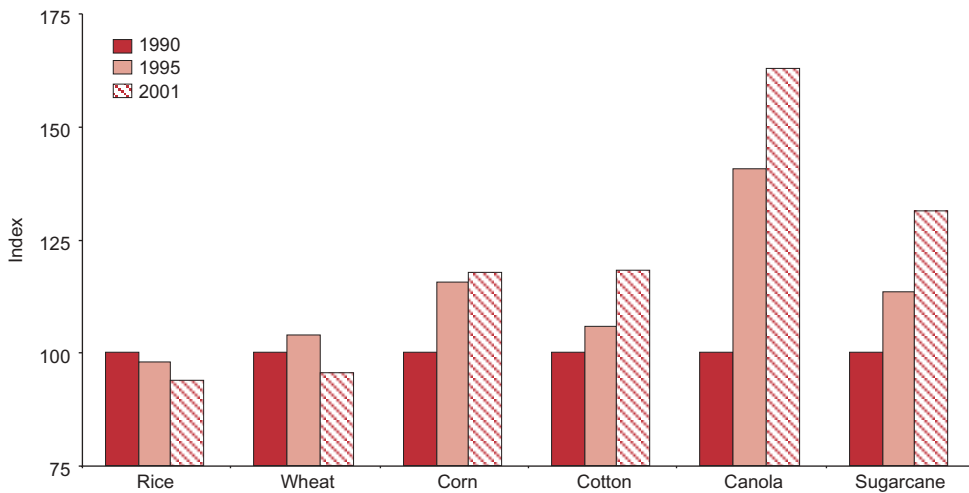


Source: Chinese National Bureau of Statistics, 2001; US Department of Agriculture, 2001a; CEIC, 2002.

Figure 4.3

Land Intensive, Low Value Crop Production Stagnating

Output of Land Intensive Agricultural Products, Tonnes, Index, 1990=100, 1990, 1995 and 2001



Source: CEIC, 2002.

FOOD PROCESSING EXPANDING

China only processes about 20 to 25 per cent of its agricultural output each year and processed food makes up less than 30 per cent of total food consumption. This compares with shares as high as 80 per cent in OECD countries. The sector is highly fragmented, storage and distribution facilities are limited and links between raw material producers and processors are weak, depressing industry productivity. As a result, although industry competition is intense, Chinese processed foods generally are lower standard than foreign investor manufactured or imported products.

However, rising consumer incomes are driving strong demand for processed food; some estimates put recent annual growth at 14 per cent. This trend is most evident in urban areas, where up to 40 per cent of food is processed. In the last decade, modern retailing outlets and storage facilities expanded rapidly, particularly in major cities like Beijing, Shanghai, Tianjin and Guangzhou. Rural consumers are much less likely to have access to modern distribution or storage facilities, limiting the industry's growth outside major centres.

Sources: US Department of Agriculture, 2001b; Canadian Department of Foreign Affairs and International Trade, 2001a; Department of Foreign Affairs and Trade, 2002a.

Agricultural Productivity Remains Low

Despite the encouraging trends in agriculture, productivity remains low, largely reflecting China's developing country status. The average farm is family run, producing largely for home needs and only trading excess output in local markets. Low levels of technology and small farm plots mean productivity per farmer, especially in broad acre crops, is low, though in labour intensive crops productivity per acre approaches international norms.⁴ Small holdings depress per capita agricultural incomes, which are only 35 per cent of urban disposable incomes (CEIC, 2002). However, agricultural labour productivity is much higher in those provinces switching towards higher value agricultural activities, particularly coastal provinces which can access export markets.

Trade and Investment Increasing

Reflecting its huge and increasingly market oriented agricultural sector, China's presence in world agricultural trade is large and growing. China's major imports include seafood, wool, oil bearing crops, such as canola seeds and soybeans, and when harvests are poor, cereal crops (Table 4.1). It also is a large exporter of food products; it is now the world's ninth largest agricultural exporter, ahead of Australia, the tenth largest (World Trade Organization, 2001a). Reflecting its comparative advantage, China continues to expand exports of labour intensive commodities, including vegetables and fruit, seafood, meat products and some processed foods.⁵

⁴ In 1994, Chinese output per acre in rice growing was 70 per cent of Australian levels and 87 per cent of Japanese levels. However, China's output per acre in peanut growing was 14 per cent higher than Australia's (East Asia Analytical Unit, 1997).

⁵ Japan is the major destination for many of these products, purchasing more than 50 per cent of China's fresh and frozen fruit and vegetable exports between 1998 and 2000; China is now the major supplier of Japanese fresh vegetable imports and second only to the United States in frozen vegetable supply (US Department of Agriculture, 2002b).

Table 4.1

China a Major Net Food Exporter

Structure of China's Food Trade, Annual, US\$ million, 1990, 1995 and 2001

Commodity	1990		1995		2001	
	Exports US\$ million	Imports US\$ million	Exports US\$ million	Imports US\$ million	Exports US\$ million	Imports US\$ million
Live animals	441	15	503	37	345	36
Meat	791	54	1 371	98	1482	623
Dairy and egg products	55	81	62	61	79	219
Seafood	1 370	102	2 853	608	3999	1319
Cereals	614	2 353	285	3 629	1237	355
Vegetables and fruit	1 726	83	3 342	184	3716	381
Sugar	351	390	379	936	320	377
Coffee, tea and spices	534	30	516	75	593	103
Feeding stuffs	758	305	351	421	339	639
Other foodstuffs	107	41	292	83	683	323
Total foodstuffs	6 746	3 454	9 954	6 131	12794	4974
<i>Foodstuffs as per cent of total trade</i>	<i>11.0</i>	<i>6.5</i>	<i>6.7</i>	<i>4.6</i>	<i>4.8</i>	<i>2.0</i>

Sources: CEIC, 2002; World Trade Atlas, 2002.

Food processing FDI

Foreign investment plays a much more important role in the agribusiness and food processing sectors, including in brewing, soft drinks, dairy and food ingredients.⁶ In the late 1990s and early 2000s, authorities continued to relax FDI restrictions in these sectors, encouraging foreign participation; however, some foreign invested agribusiness and food processing ventures still must be majority Chinese owned. Major food multinationals investing in China include Cargill, ConAgra, Cadbury, Coca-Cola, Nestle, Kraft, PepsiCo, Danone and Asahi (Canadian Department of Foreign Affairs and International Trade, 2001a; US Department of Agriculture, 2002a). Some agri-processing firms, particularly multinational processors, also are building storage and distribution facilities to complement their production facilities (*China Business Review*, www.chinabusinessreview.com, July 1997). Retail and wholesale multinationals are investing strongly in modern outlets and networks, further developing agribusiness infrastructure.

⁶ By the late 1990s, analysts estimate foreign firms had invested US\$38 billion in the Chinese processed food industry (Bolling et al., 1999).

DEVELOPMENTS IN AGRICULTURAL FDI PRIOR TO WTO ENTRY

Until recently, authorities tightly restricted agricultural foreign direct investment, FDI. Generally, foreign investors could not purchase agricultural land or occupy large tracts of arable land and authorities restricted foreign participation in certain sectors. Hence, between 1997 and 2001, foreigners only invested US\$3.5bn in farming, forestry and fisheries, representing less than 2 per cent of total FDI inflows.

However, authorities now encourage agricultural investment more, particularly in labour intensive sectors including vegetables, fruit, flowers and seafood ventures, and are more receptive to foreign investors leasing land and undertaking contract farming (Table 4.3). This policy shift is encouraging higher recent agricultural FDI inflows. For example, United States and Taiwanese flower companies are establishing joint ventures in Yunnan while Thai and Japanese seafood companies are forming joint ventures in the rapidly expanding aquaculture industry. Japanese, Republic of Korean and Taiwanese investors also are investing in agricultural and food ventures in provinces close to their home markets, including Shandong and the north-east of China. While further growing this investment depends on reducing agricultural trade protection in key North East Asian markets, China is very competitive in these sectors.

Sources: CEIC, 2002; Deloitte and Touche, 2001c, 2002b; Maruha Corporation, 2002; US Department of Agriculture, 2002b.

AGRICULTURAL REFORMS AND CHALLENGES

Post 1978 agricultural price, distribution, procurement, ownership and land tenure policies mean most farmers now respond to market determined prices for most products and increasingly can produce agricultural commodities in which they have a comparative advantage (East Asia Analytical Unit, 1997). Since the mid 1990s, the Government continued relaxing controls on what farmers grow and the prices they receive and relaxed controls on rural labour movement, allowing underemployed agricultural workers to search for employment in other regions. In recent years, anticipating WTO entry, the Government continued reforming agriculture, particularly in grain distribution and production and land tenure issues.⁷

Nevertheless, authorities recognise they need to further strengthen land tenure, to continue dismantling price controls and output guidance and to completely free the movement of agricultural products and labour to help farmers compete in increasingly open markets. High taxes and arbitrary fees, inadequate infrastructure, weak distribution channels for farm inputs, poor marketing systems, minimal access to bank credit and increasing environmental degradation also pose major challenges.

⁷ As reforms undertaken prior to 1997 are detailed in the East Asia Analytical Unit's 1997 China report, the following sections discuss post 1997 reforms.

Agricultural Price, Procurement and Land Use Reforms

The Government continues to reduce price, output and land use controls constraining farmers' competitiveness. In August 2001, the Government removed price controls on a further 128 goods and services, including on some agricultural commodities (United States-China Business Council, 2001).⁸ In some provinces, authorities are assisting farmers move into higher value-added crops and activities, including by reallocating land use and providing training (Li, C., 2002).⁹ This has resulted in the share of land sown with lower value crops continuing to fall since 1995, with this trend accelerating after 1999 (Figure 4.1) (CEIC, 2002). The Government also gradually is reducing state intervention in grains procurement.

Land Tenure Reform

Chinese agricultural production per worker remains relatively low, particularly in broad acre crops, mainly because farmers do not own their own land and cannot buy and sell land to secure economically sized plots. Uncertain land titles also reduce farmers' incentives to make major long term investments, for example in irrigation systems, orchard planting or more sustainable farming techniques (US Department of Agriculture, 2002c).

However, some land tenure reforms are occurring. In 1998, the Government amended the Land Management Law to give farmers longer term, 30 year, land use rights backed by written contracts (US Department of Agriculture, 2002c). The new amendments also limit authorities' ability to reallocate land or expropriate agricultural land for non-agricultural uses (Rural Development Institute, 2002).¹⁰ In some parts of China, farmers can consolidate their land holdings to improve efficiency, allowing rural workers to increase off-farm income (*FarmChina*, www.eng.farmchina.com, 3 July 2001). Farmers, particularly in southern coastal provinces, also are entering long term leasing arrangements with agricultural syndicates (Deloitte and Touche, 2001b).

Tax and Fees Reform

Despite falling central government taxes on farmers in the 1990s, local governments still rely on agricultural taxes and fees for much of their revenue base, burdening farmers (US Department of Agriculture, 2001a, 2001b). Although good data on local taxes and fees is scarce, reports suggest

⁸ Just prior to entering the WTO, 84 per cent of agricultural prices were market determined, 7 per cent of prices were government guided and 9 per cent were set by the Government (World Trade Organization, 2001b). As part of its WTO accession agreements, China committed to remove price controls on all but five agricultural and food groups; these groups are grains, vegetable oils, fertiliser, silkworm cocoons and cotton (World Trade Organization, 2001c). China has undertaken to ensure that these controls will not be applied in a manner that provides protection to domestic production or adversely affects imports.

⁹ For example, the central authorities continue to reduce the amount of land 'allocated' to cereal crops. In Shandong, large areas have been converted from grain to vegetable production, largely to supply Japanese consumers (US Department of Agriculture, 2002a). In Guangdong, authorities continue to cut significantly the amount of land devoted to grain crops; while these areas are to remain 'agricultural', they can now be used for fruits and vegetables, livestock and other 'newer activities' (Li, C., 2002).

¹⁰ However, land reallocations are not prohibited; many contracts explicitly allow for reallocation and surveys suggest that only 12 per cent of farmers believe the extended land use contracts definitely will prevent reallocation during the lease period (US Department of Agriculture, 2002c).

these can be up to 25 per cent of farmers' net income (US Department of Agriculture, 2001b).¹¹ Recent rises in local taxes and fees on farmers hit the sector hard, occasionally leading to farmer protests (US Department of Agriculture, 2001b).

POST 1998 GRAIN REFORMS

In recent years, the Government initiated reforms in its grain purchasing and distribution systems. Prior to 1998, despite two decades of market-oriented reforms, the state still controlled two thirds of China's grain marketing, mainly to support its grain self-sufficiency policy, boost farmers' incomes and keep food affordable in urban areas. Although half of grain market transactions were conducted at close to market prices, the Government's remaining purchases were at controlled prices. This imposed a significant burden on its budget through mounting state grain bureaus' deficits and on the banks via misappropriated loans.

To stem these costs, the Government launched some grain distribution reforms in 1998, but these failed to tackle the fundamental problems such as state grain enterprise inefficiency and their obligation to procure grain at high prices to safeguard farmers' incomes. Consequently, the state grain system continued to acquire stocks of low-quality grains and faced increasing financial and storage problems. This policy package also continued to distort grains pricing and production.

Hence, in 2000, the authorities launched a new series of reforms to rectify the procurement system's deficiencies. Importantly, they phased out procurement of low-quality grain, including spring wheat in northern China, and wheat, maize and early indica rice in southern China. At the same time, the Government allowed Zhejiang province to trial further grain liberalisation, including separating grain administration departments from their business operations, freeing up grain distribution and ceasing discrimination against private distribution investment, phasing out subsidised grain purchases and allowing farmers further choice over their farm operations. In August 2001, due to the success of this trial, the State Council extended this initiative to three major municipalities and five other coastal provinces, ahead of possible nationwide implementation (*China International Business*, www.cib-online.net, January 2002).

Despite these encouraging developments, state grain procurement, pricing controls and import restrictions still significantly distort local grain markets. Given the system's many long-standing problems, most analysts believe the best way to resolve grain distribution inefficiency and cut resulting financial burdens is to abolish state procurement. Dismantling the state grain enterprises' monopoly power also will assist China to comply with the WTO requirement to not discriminate against imports.

Source: Wu, H. et al., 2002; East Asia Analytical Unit, 1997.

¹¹ A large part of the fees levied are arbitrarily imposed by local governments to fund local government wages, infrastructure and other social services expenditures. Recent surveys in Anhui showed that over one million farmers were paying three times the amount of tax they were legally obliged to (China.org.cn, 2001).

In response, in 2000, the central authorities began trialling schemes to replace fees with legal taxes in a number of provinces (*People's Daily*, www.english.peopledaily.com.cn, 10 December 2001). Authorities also are attempting to limit the proportion of farm income paid in taxes (China.org.cn, 2001).¹² To date, results have been mixed. In some provinces, authorities abolished numerous fees and reduced the farm tax burden; in others, where farm taxes fund education, health and infrastructure services, reform is more difficult without extra funding (China.org.cn, 2001; Lam, 2001). It will be several years before agricultural tax reform is complete and begins broadly contributing to higher net farm incomes (*South China Morning Post*, www.scmp.com, 14 March 2001).

Meeting Infrastructure, Marketing and Finance Needs

Rural China lacks sufficient infrastructure to efficiently produce, store and transport many bulk agricultural and perishable products. In many inland provinces, poor irrigation, storage, handling and road and rail access inhibit farmers producing and selling higher value added products or transporting them to urban and international markets.¹³ As a result, Chinese distribution costs form a much higher part of total agricultural product costs than in developed countries; the Chinese Academy of Social Sciences estimates transportation and logistics account for 20 per cent of the retail prices of goods in China, about five times its share in the United States (US Department of Agriculture, 2002a). Also, marketing capacities are extremely limited and Chinese farmers have minimal access to bank finance, limiting opportunities to try new crops or invest in efficiency enhancing technologies or services.

In the 1990s, central and local governments invested heavily in transport infrastructure, constructing highways linking rural and urban areas and partly addressing these deficiencies. (See Chapter 6 – *Manufacturing and Infrastructure*.) The Government also encourages foreign participation in developing agricultural product storage and distribution facilities.¹⁴ However, this infrastructure still requires much investment, providing opportunities for experienced Australian suppliers. The Government also is encouraging stronger financial institution lending to farmers, although this credit still forms only a small part of total lending in the economy.

¹² Similar limits have been implemented in the past with little success.

¹³ Australian agribusiness exporters, particularly of perishable produce, also should be aware of the business challenges these inadequate and costly infrastructure and distribution networks pose.

¹⁴ For example, in the early 1990s, the Australian Wheat Board, now AWB Limited, participated in a pilot grain storage project.

AGRICULTURE FACES ENVIRONMENTAL CHALLENGES

Chinese agriculture faces severe environmental challenges. Decades of unsustainable farming techniques, inadequate controls on land clearing, water course management, water rationing and chemical fertiliser usage are generating significant environmental problems, including water pollution, high soil chemical content, salinity and desertification. Increasing urbanisation also is encroaching on agricultural land, particularly in the eastern provinces, while rapid growth in commercial meat production and processing is straining waste water treatment capacity.

These problems threaten the viability of producing many land intensive crops and undermine the competitiveness of some higher value agricultural products. Water availability and quality is a particular concern. For example, extensively polluted waterways and falling groundwater tables pose major challenges for ongoing grain and cotton production in agricultural provinces north of the Yellow River.

To address environmental problems, central and some local authorities are boosting wastewater treatment facilities, undertaking extensive reforestation projects and encouraging farmers to improve farming techniques. Further reforming land use and title systems would encourage more sustainable farming practices. However, authorities realise much more needs to be done to address these major challenges, and are seeking international assistance through aid programs and foreign private sector participation.

Sources: World Bank, 2001; Canadian Department of Foreign Affairs and International Trade, 2001c; Li, S., 2002; Luo, 2002; Xu and Zhang, 2002.

IMPACT OF WTO ENTRY ON AGRICULTURE AND AGRIBUSINESS

Combined with ongoing reforms, China's WTO entry commitments to reduce agricultural trade protection will generate further considerable change in Chinese agricultural production and trade, generating opportunities for Australian exporters.

China's WTO Commitments on Agriculture and Agribusiness

In entering the WTO, China committed to reducing average agricultural tariffs to 15.7 per cent by 2010, will eliminate import licences on some important agricultural commodities and replace them with tariff rate quotas, will immediately eliminate agricultural export subsidies and will limit support for the agricultural sector to 8.5 per cent of the value of agricultural production.¹⁵ Details of major commitments are provided in Appendix Tables 4A.1, 4A.2 and 4A.3.

¹⁵ Tariff rate quotas provide guaranteed access for a designated volume of imports at a relatively low tariff; above the quota, imports typically attract a much higher tariff rate.

WTO Impacts on Chinese Agriculture and Agribusiness

Economic Analytical Unit modelling commissioned for this report indicates WTO entry will modestly improve growth of Chinese agricultural production relative to not entering WTO. However, WTO entry will substantially boost agricultural and food imports, which are forecast to increase by about 15 per cent per year for the next ten years, compared to 12 per cent growth without WTO entry (Table 4.2). Combined with stronger domestic consumption of agricultural and food products, WTO entry also should encourage Chinese agricultural producers and exporters to specialise more in areas of greater comparative advantage, reducing lower value broad acre exports and increasing production of higher value labour intensive food and other agricultural sectors. Over the next decade, these projected changes should significantly improve business opportunities for Australian farmers and food producers, particularly in grains and some high value consumer food products.

Table 4.2

Summary of Major Impacts of WTO Accession on Chinese Agribusiness China's Agribusiness Value Added, Production, Imports and Exports, Growth Rate and Level, Per cent and US\$ billion, 2000-2010

	Average annual value added growth rates without WTO entry 2000-2010	Increase in annual growth rates due to WTO entry 2000-2010	Absolute level of value added without WTO entry in 2010 US\$ billion, Constant 2000 prices	Change in absolute level of value added due to WTO entry in 2010 US\$ billion, Constant 2000 prices
	per cent	percentage points		
Agricultural output	3.0	0.3	230.7	6.2
Grains	2.2	0.3	63.7	1.6
Other crops	3.2	0.3	61.4	1.8
Livestock	3.9	0.2	60.0	1.4
Other agriculture	2.6	0.3	44.5	1.3
Food processing output	6.8	1.0	106.9	10.2
Egg and dairy products	6.6	0.6	1.1	0.1
Sugar refining	6.0	0.1	1.7	0.0
Alcoholic beverages	7.1	1.3	19.1	2.4
Other food products ^a	6.8	0.9	85.0	7.7
Agricultural and food imports	12.0	3.0	33.9	10.4
Grains	11.1	3.6	7.8	2.9
Other crops	12.6	3.7	3.4	1.3
Livestock	14.3	3.7	4.4	1.6
Other agriculture	10.0	4.0	1.5	0.6
Egg and dairy products	13.1	2.5	0.5	0.1
Sugar refining	12.7	2.4	1.5	0.3
Alcoholic beverages	10.9	1.9	0.1	0.0

	Average annual value added growth rates without WTO entry 2000-2010	Increase in annual growth rates due to WTO entry 2000-2010	Absolute level of value added without WTO entry in 2010	Change in absolute level of value added due to WTO entry in 2010
	per cent	percentage points	US\$ billion, Constant 2000 prices	US\$ billion, Constant 2000 prices
Other food products ^a	12.0	2.4	14.9	3.5
Agricultural and food exports	3.7	-1.5	28.0	-3.8
Grains	0.3	-2.5	2.4	-0.5
Other crops	0.6	-2.5	2.3	-0.5
Livestock	0.3	-2.5	1.4	-0.3
Other agriculture	0.0	-2.4	0.7	-0.2
Egg and dairy products	5.2	-1.2	0.1	0.0
Sugar refining	4.4	-1.6	2.0	-0.3
Alcoholic beverages	7.7	0.3	0.9	0.0
Other food products ^a	5.1	-1.2	18.3	-2.0

- Note:
- a Other food products includes grain milling, meat and fish processing and beverages.
 - b The first column shows projected growth in the nominated sector over the next ten years if China did not enter the WTO.
 - c The second column shows how the growth trend is predicted to be altered as a result of China entering the WTO. For example, the average annual growth rate of agricultural value added is likely to be 0.3 percentage points higher during each of the ten years following China's entry to the WTO.
 - d The third column shows the forecast size of Chinese agriculture in constant US\$ billion in 2010 if China did not enter the WTO.
 - e The fourth column shows the forecast gain in size of Chinese agriculture in constant US\$ billion in 2010 as a result of China entering the WTO. For example, agricultural value added is forecast to be US\$6.2 billion higher in 2010 than if China had not entered the WTO.

Sources: Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

However, changing production and trading patterns will take time, as farmers need to acquire new skills and undertake new investments. Restrictive internal migration and land use and tenure policies also could constrain restructuring. As well, authorities may try to use quarantine and other technical trade barriers to slow imports. (See Chapter 1 – *Doing Business*.) Authorities are aware they need to continue liberalising and reforming agriculture for farmers to receive the full benefits of WTO accession.

AUSTRALIAN TRADE OPPORTUNITIES

WTO entry and on-going agricultural reforms will have a major impact on Australian agricultural and agribusiness export opportunities in China. Currently, over 80 per cent of Australia's agricultural exports to China are land intensive products and crops, including wool, barley, canola seeds and occasionally wheat. (See Chapter 3 – *Australia-China Business*.) Further restructuring of Chinese agriculture and rising incomes will reinforce this trading pattern, as well as boost demand for some Australian processed foods and related ingredients, and agricultural goods and services inputs.

CURRENT AGRIBUSINESS EXPORT OPPORTUNITIES

The Economic Analytical Unit commissioned a Melbourne based firm, TradeData International, to analyse Australia's current trade opportunities in China for this report. Using detailed data on Australian and Chinese agricultural export and import prices and growth, Chinese market size and Australian export capacity, they identified potential opportunities for Australian agricultural and food exports to China.

This analysis highlights some immediate new opportunities for Australian agribusiness exporters. It also provides an estimate of likely market potential for Australian exporters over the next five years. The most prospective opportunities are included in Appendix Table 4A.4.

Wool and Cotton

Following a possible short term adjustment, China should increase its importance as Australia's largest wool market.¹⁶ Better access through new tariff rate quotas and stronger industry growth should boost Chinese demand for imported wool and cotton, although competition in cotton will be much tougher due to a far larger group of international cotton producing nations.¹⁷ In joining the WTO, China will benefit from the dismantling of the Agreement on Textiles and Clothing on 1 January 2005, which currently allows some economies to restrict their imports of textile and apparel from developing countries.¹⁸ This promises to boost China's clothing and textile exports to major markets.¹⁹

As these barriers are removed post WTO entry, economic modelling indicates China's wool and cotton textile industries will grow rapidly; with complete liberalisation of global apparel markets, some modelling suggests Chinese apparel exports' share of world apparel trade will grow from 19 per cent to 48 per cent by 2005 (Ianchovichina et al., 2001). As a result, Chinese industry will demand more textiles and clothing inputs, including imported wool and cotton.²⁰

¹⁶ Some industry reports suggest the wool textile industry currently suffers from over capacity and poor profits, largely due to a heavy state owned presence. Restructuring of this industry possibly will require short term capacity adjustment to place the industry on a more sustainable and competitive long term footing (FarmChina, www.eng.farmchina.com, 20 July 2001).

¹⁷ Details of China's tariff and tariff rate quota commitments on wool and cotton are provided in Appendix Table 4A.1 and Table 4A.2.

¹⁸ Australia does not restrict imports of Chinese textiles and clothing products.

¹⁹ However, it is important to note that major textile and clothing importers, particularly the United States, have retained the right to impose strong safeguards and anti-dumping actions against imports of these products from China long after the Agreement on Textiles and Clothing expires. This may limit the potential future growth of Chinese apparel exports.

²⁰ However, technical import barriers on China's wool trade including quarantine and inspection requirements can be significant and challenging.

Crops

Throughout 2002, China gradually issued tariff rate quotas for major Australian exports including wheat and sugar, although in so doing, it did not fully comply with its WTO commitments.²¹ For these in-quota imports, tariffs on wheat are 1 per cent, corn 1 per cent, rice 1 per cent and sugar 20 per cent (Appendix Table 4A.1, Appendix Table 4A.2). Authorities also issued non state traders portions of tariff quotas in some of these crops, although difficulties again occurred in the issuing process. Some of these tariff quotas are set to increase over time and unused quotas will be redistributed towards the end of each calendar year.²² These are important new measures since high tariffs, state trading and non-transparent decisions often limited certainty in previous major crop trade.

GRAIN POOL OF WESTERN AUSTRALIA

The Grain Pool of Western Australian, GPWA, is Western Australia's non-profit single desk exporter of barley, lupins and canola. GPWA recently formed an alliance with ABB Grain Ltd, the South Australian headquartered, recently privatised single desk barley exporter, to market barley worldwide through a new organisation, Grain Australia. Grain Australia markets over 35 per cent of the world's traded malting barley and 10 per cent of feed barley.

China is the world's largest importer of malting barley. Grain Australia exports over 75 per cent of its malting barley to China; other major competitors are Canada and the European Union. While Australia's barley trade with China is longstanding, barley exports to China grew strongly in the 1990s following a rapid expansion in China's beer industry and stronger foreign brewing investment. Significant changes also occurred in the structure of the Chinese brewing industry, with the rise of specialist maltster organisations driving change in barley demand; more recently, major domestic brewers including Tsingtao and China Resources Enterprises purchased substantial domestic brewing capacity and expanded their imports of high quality barley.

GPWA notes that doing business in China can be challenging, sometimes requiring a different approach to that adopted for other markets. Market price changes between signing a contract and delivery can cause difficulties; GPWA understands attempts to enforce contract terms through the courts may not be successful, even if a case is won. As a result, GPWA tends to sell only on short term contracts. Differing standards of quarantine analysis between Australia and China also can pose challenges; developing good relationships with authorities and customers is important in such situations. Despite these difficulties, GPWA is confident China will continue to remain a vital and growing market for Australian barley producers.

Source: GPWA, 2002.

²¹ There was a delay in the issue of these tariff quotas; they were scheduled to be issued on 1 January 2002, but some were not allocated until later in 2002 and only in a piecemeal fashion.

²² For example, in 2002, non state traders are guaranteed 10 per cent of the tariff quota in wheat, 32 per cent of the quota in corn, 50 per cent of the quota in rice and 30 per cent of the quota in sugar. For corn, this share of quota will increase to 40 per cent by 2004. (For more details, see Appendix Table 4A.1.)

Two broad trends will stimulate Chinese demand for imported broad acre crops, particularly wheat, barley and canola. First, growing Chinese incomes will boost consumer demand for value added foodstuffs and beverages using higher quality grain and edible oil inputs (US Department of Agriculture, 2001a, 2001b).²³ China predominantly produces lower quality grains; although the Government now actively procures higher quality grain, China still produces too little to meet domestic demand. Hence demand for higher quality foreign grains is likely to remain strong.

Second, Chinese producers are likely to continue to move out of producing lower value, lower profit crops including grains, sugar and oilseeds. Inefficient land holding sizes, government land reclamation policies, rising environmental pressures, particularly water shortages, and more attractive on and off-farm earning opportunities will drive this trend. Increasing competitive pressures from imports permitted under WTO entry could accelerate this process. Australia's relative proximity and competitiveness in broad acre crops means it should increase its exports of these commodities, although strong competition is likely from other major traders such as the United States, Canada, Brazil and France.

AUSTRALIAN OILSEEDS FEDERATION

The Australian Oilseeds Federation, AOF, is the peak body representing the Australian oilseeds industry. Between 1997 and 2001, Australia exported an average of 1.6 million tonnes of oilseeds and other edible oil-containing commodities, worth approximately \$570 million per annum. On average, canola seeds accounted for just over two-thirds of these exports.

Canola seed export growth to China in recent years was extraordinary. In 1996, Australia exported no canola to China, yet by 2000, China was importing over 400 000 tonnes of canola seeds from Australia, making China Australia's largest customer for canola seeds. This growth was largely related to Chinese government policy aimed at encouraging domestic oil processing at the expense of imports of the processed product. As a result, China's oil crushing capacity expanded significantly in the late 1990s, boosted by significant multinational investment.

China's imports of oilseeds, in particular canola, fell sharply in 2001, in response to increased local production, ambiguous genetically-modified organism policy requirements and local policy initiatives. The Australian industry was hard hit by this important customer standing out of the market and has sought other new markets to meet this shortfall. Looking ahead, China will remain an important customer for Australian oilseeds, as edible oil demand is expected to continue growing with sustained gains in consumer income. However, competition in this market is likely to remain strong, particularly from Canadian canola, United States and South American soybeans and Malaysian palm oil.

Sources: Australian Oilseeds Federation, 2002; Department of Foreign Affairs and Trade, 2002b.

²³ This increase in demand includes grains and oils used as feed for China's growing meat and dairy industries.

Meat and Seafood Products

China is the world's largest producer of pork, mutton and lamb, goat meat and a variety of aquaculture and seafood products (Australian Bureau of Agricultural and Resource Economics, 2001; Food and Agriculture Organization, 2002). However, per capita meat consumption is still relatively low, particularly for beef; despite planned tariff cuts, low average consumer incomes will limit large scale export opportunities for some time. However, the import market is growing for higher quality and better presented seafood and meat, especially beef, for the higher income household and restaurant trade.²⁴

While China produces considerable quantities of seafood products, limiting Australian export opportunities, niche import markets including for prawns and abalone are expanding (Australian Bureau of Agricultural and Resource Economics, 2001).

Australian firms also may find good opportunities exporting production equipment and related goods and services to rapidly growing meat and fish growing and processing sectors. These sectors, particularly commercialised meat production, are expected to expand dramatically over the next decade in response to higher consumer demand for quality products (US Department of Agriculture, 2001b; World Bank, 2001). Potential export opportunities include equipment, technologies, consumable inputs and services related to feedlots, abattoirs, stock breeding and fish farming. Australian animal breeding and genetics firms, including Dale River Transplants, RAB Australia and the Knocknagulagh Goat Stud, already are supplying significant quantities of high quality embryos and breeding stock to Chinese farmers (RAB Australia, 2002; Knocknagulagh Boer Goat Stud, 2002).

Dairy Products

Domestic dairy consumption and production are growing rapidly from a low base, expanding export opportunities for Australian milk and dairy related goods and service producers. Currently, local producers supply 90 per cent of domestic needs but per capita consumption is very low by international standards, with about 40 per cent of the population consuming no dairy products at all (US Dairy Exporters Council, 2000).²⁵

²⁴ Australian producers, wholesalers, retailers and distributors could play a significant role in improving the quality and competitiveness of the domestic meat industry, its cold chain and retailing arm. Research suggests meat cuts can be used for different purposes in China than in Western countries; hence intending exporters should carefully investigate such value adding opportunities (Lonergan, 2002).

²⁵ However, imports dominate in some product categories, such as whey, and are an important component of total powdered milk supply.

However, reflecting increasing incomes and growing awareness of the nutritional benefits of dairy products, consumption and imports are growing very strongly (Wang, 2002). More consumers, particularly in urban areas, now access modern retail chains and possess refrigerators, enhancing their ability to buy and store perishables. (See Chapter 2 – *Economic Overview*.) Also, local consumers increasingly demand Western style foods, particularly biscuits and cakes, boosting demand for bulk dairy ingredient products. Commitments to cut dairy tariffs should boost Australian export opportunities (Appendix Table 4A.2). For example, China's cheese imports could rise by up to 50 per cent by 2010, though other suppliers, including New Zealand, also are competitive in this promising market (Beghin, 2001).

BONLAC FOODS

Bonlac Foods Limited, one of Australia's largest manufacturers of dairy products and ingredients, has exported dairy ingredient products to China since the early 1990s. In 2001, its world-wide sales revenues exceeded \$1 billion, with half its sales coming from exports to more than 50 countries. China purchases about 10 000 tonnes of Bonlac's total annual overseas sales of about 120 000 tonnes of dairy products.

Bonlac established its China business through trade enquiries following a decision to expand its export business. Its main exports to China are wholesale dairy ingredients to produce biscuits and bakery products. The bulk of its sales are conducted through the offices of other multinationals and individual sales intermediaries, with recent Bonlac restructuring broadening available outlets.

While Bonlac's business relationship with China is successful, it considers China a challenging market to understand and sustain. It is crucial for exporters to gain a strong knowledge of the market and likely competitors prior to entry. Connections and relationship building are vital. Securing prompt payment of outstanding debts is an ongoing challenge; Bonlac has tried to shift some of this payment risk from itself to its distributors, requiring them to deal with this issue. Repatriation of funds, while improving, also remains an occasional problem. A good understanding of the regulations and bodies involved in trade financing is very important, as meeting requirements can be difficult.

Despite these challenges, Bonlac is positive about its future in China. Falling tariffs over recent years and further cuts now promised under WTO will boost Chinese demand for higher quality produce in the years ahead. Longer term growth in Chinese incomes also should begin to boost demand for quality retail products.

Source: Bonlac Foods Limited, 2002.

In the short term, constraints on local dairy processing capacity imply imports will meet a larger share of this growing demand (Wang, 2002). While much of the local dairy industry is small scale and uses less advanced technology, authorities are encouraging the development of a large scale, commercialised dairy industry to boost productivity.²⁶ This is boosting demand for dairy equipment, inputs and services. Increased foreign competition should increase pressure on Chinese producers to boost efficiency, including by seeking improved technologies and breeding stock, offering additional service, related inputs and technology export opportunities to Australian companies. Local dairy farming groups already are importing Australian dairy cows to improve herd productivity and quality (Deloitte and Touche, 2002a).

Higher Value Foods and Beverages

Better retail and storage infrastructure, lower tariffs and growing incomes are increasing demand for imported processed and higher value horticultural, food and beverage products. Wealthier consumers and the rapidly developing hotel, restaurant and fast food trade also increasingly demand better quality fruit, vegetables, processed food and beverages. Lower tariffs should increase the competitiveness of higher value foreign produce and foodstuffs (Appendix Table 4A.2). While foreign and domestic producers strongly contest these sectors, Australian producers are well placed to supply off-season produce in competition with local and other northern hemisphere suppliers.²⁷

BRL HARDY

BRL Hardy is a leading Australian wine company and one of the world's ten largest wine groups; it holds over 20 per cent of the Australian premium wine market and exports to over 60 countries. In mid 2002, BRL Hardy signed a distribution alliance with China's leading premium wine producer, Dragon Seal Wines. Dragon Seal Wines will import the Hardy's product for distribution through its extensive 20-city network in China. China's growing incomes, large hotel and expatriate markets and WTO accession all proved attractive in establishing this venture.

In doing business in China, BRL Hardy identifies two key challenges – choice of partner and getting paid. If starting from scratch in choosing a partner, BRL Hardy recommends extensive research on the company, its background, its personnel and its relevant experience; in Dragon Seal Wines, BRL Hardy found a partner with similar skills and experience and strong understanding of the wine business and related marketing and logistics issues. Although BRL Hardy has not itself experienced payment problems, they emphasise the need to quickly establish sound and clear payment arrangements to avoid risks; in the initial stages of a new venture, upfront payment or letters of credit are recommended.

Source: BRL Hardy, 2002.

²⁶ For example, resettled farmers from the Three Gorges project are being encouraged to establish dairy farms and authorities are giving dairy processors incentives to set up in the same region (Wang, 2002).

²⁷ However, the potential Australian horticultural or processed food exporter should closely examine market conditions, particularly given China's still fragmented and underdeveloped storage and handling infrastructure and distribution networks.

TIMBER PRODUCTS: AUSTRALIAN EXPORT POTENTIAL

Although China is one of the world's largest wood producing countries, authorities recently introduced policies promoting sustainable forest and environmental management, cutting production potential. These policies responded to severe flooding of the Yangtze River in the late 1990s, successfully enforcing logging bans and reducing timber supply from natural forests; estimates suggest industrial timber production fell by about one-third between 1997 and 2001.

However, Chinese timber demand continues to increase. In response, the authorities are encouraging extensive tree planting on farm plots, waste lands and in commercial timber plantations, including via foreign investment. While these measures should boost timber supply in the medium to long term, in the short term, imports must fill the supply shortfall. Between 1998 and 1999, the share of imports in domestic consumption rose from 6 per cent to 11 per cent. China now is the world's largest importer of logs and the second largest importer of sawn wood.

Australian wood product exports to China have grown strongly in recent years; Australia already supplies a significant share of Chinese woodchip imports. WTO entry further cut Chinese wood product tariffs, boosting the competitiveness of imported products. Hence, substantial potential exists for Australian wood exporters in the Chinese market, particularly up to 2010, after which recently planted Chinese timber resources will reach maturity. However, competition from New Zealand, Indonesia, Malaysia, the United States, Canada and particularly the Russian Federation will be very strong.

Source: Australian Bureau of Agricultural and Resource Economics, 2002.

Other Related Exports

As one of the most open, innovative and productive agricultural producers in the world, Australia has a wide range of agricultural expertise, technologies and specialised inputs to offer China as it seeks to boost its agricultural productivity. China also faces many of the same environmental and climatic challenges confronting Australia, including dry land agriculture, flood control and supplying efficient infrastructure for widely dispersed farming, storage, transport and processing operations. Australia's expertise in addressing agricultural land degradation, water pollution and supply problems also should provide significant opportunities for Australian goods and service suppliers. Australia's experience in agricultural training services and environmental solutions opens further opportunities for Australian businesses in China.

HERITAGE SEEDS

Heritage Seeds, a Melbourne-based seed supply firm with extensive seed research and development capacities, entered the Chinese market in 1997. Its major business areas are seeds for amenity and erosion control, forage, cereals and other crops. Heritage Seeds sells its products to over 50 countries, with export income constituting roughly 20 per cent of total revenues.

Heritage Seeds initially entered the China market through the Seeds Australia industry based joint venture program, but has operated largely independently since then. While seeds for amenities, including parks, gardens and sports facilities initially were its largest market in China, it recently shifted more into agricultural and environmental seed markets. Its customer base therefore has evolved from predominantly municipal and provincial authorities to agricultural cooperative and individual customers. Government grants to farmers and cooperatives to undertake more productive and ecologically sustainable grazing and cropping has increased demand for Heritage Seeds' products. Authorities recognise such regeneration is crucial to overcome ongoing environmental damage, particularly related to salinity, desertification and flood vulnerability.

China has proved an interesting if challenging market for Heritage Seeds. Persistence and relationship building have been the keys to success. Initial negotiations for a new contract can be arduous, but they have found as market players increasingly recognise their experience in the market, business dealings have become more frequent and easier to handle. At times, customs officials can apply tariffs arbitrarily and remittance of funds back to Australia can be difficult. It also has found contracts written in English may not be recognised in China, and so recommends preparing and signing Chinese translations. Despite these challenges, China is proving a strong market for Heritage Seeds; it now accounts for close to 25 per cent of overseas sales and Heritage Seeds expects ongoing liberalisation and restructuring will assist further expansion.

Source: Heritage Seeds, 2002.

AUSTRALIAN INVESTMENT OPPORTUNITIES

Although authorities still restrict agricultural FDI in some sectors and continue to prohibit the foreign purchase of land and large land intensive farming operations, they have lifted most restrictions in labour intensive and higher value added agricultural and agribusiness sectors (Table 4.3).

Table 4.3

Limits on Agricultural and Agribusiness FDI Falling Further **Latest Official Chinese Guidelines to Foreign Agricultural and** **Agribusiness Investment, Selected Sectors, April 2002^a**

Sector of agriculture	Nature of limitation in place, if any
Encouraged sectors^b	
Developing environmentally friendly cultivation technologies for vegetables, mushrooms, fruits and tea	None
Developing and producing high yielding new crop varieties for sugar, fruit trees, flowers, plants and foliage grasses	None
Producing flowers and related nurseries	None
Producing organic fertilising resources	None
Planting and breeding traditional Chinese medicines	Limited to equity or contractual joint ventures
Planting forest trees	None
Planting natural rubber, sisal and coffee	None
Breeding good strains of domestic animals, poultry and fish	Excludes strains unique to China
Constructing and operating environmental protection projects, such as planting trees and grass, aimed to prevent and treat desertification and soil erosion	None
Storage and processing of grains, vegetables, fruits and fowls and livestock products	None
Processing of aquatic products, seashells and seaweed	None
Developing and producing fruit and vegetable drinks, protein drinks, tea drinks and coffee drinks	None
Developing and producing foodstuffs for infants and seniors	None
Producing dairy products	None
Developing and producing biological and protein feed	None

Sector of agriculture	Nature of limitation in place, if any
Restricted sectors^c	
Developing and producing grains, cotton, oil seeds and potatoes	Chinese partner must have majority ownership share
Processing logs of precious trees	Limited to equity or contractual joint ventures
Producing yellow rice wine, brand name liquor and foreign branded carbonic acid beverages	Unspecified
Prohibited sectors^d	
Breeding and planting agricultural products unique to China	No foreign investment permitted
Genetically modified plant seed products	No foreign investment permitted
Fishing in Chinese territorial waters	No foreign participation permitted
Processing of Chinese green tea and special Chinese teas using traditional Chinese technologies	No foreign participation permitted

Note: a These guidelines were released in early 2002. As a general rule, all sectors not specifically identified in this catalogue of investment are permitted. Permitted sectors are those where investments less than US\$30m require only local government approval, investments between US\$30 and US\$100m only require MOFTEC approval and investments over US\$100m require State Council approval.

b Encouraged sectors are those where investments less than US\$30m require only local government approval and investments over US\$30m require provincial government approval.

c Restricted sectors are those where investments less than US\$30m require only provincial government approval.

d Prohibited sectors are those where investments are not approved.

Source: State Development Planning Commission, 2002; American Chamber of Commerce, 2002.

Authorities also continue to encourage FDI in agricultural infrastructure and food processing. Although domestic and international firms compete strongly in food processing markets, China's large domestic market has attracted several Australian firms. Prominent Australian direct food processing and beverage investments include Fosters' brewing operations and Goodman Fielder's edible oil processing facility, both in Shanghai.

AWB LIMITED

AWB Limited, formerly the Australian Wheat Board, Australia's major national grain marketing organisation and one of the world's largest wheat management and marketing companies, has a major presence in the Middle East and Asia, including in China. Throughout the 1990s, AWB's wheat exports to China were highly variable, determined mainly by Chinese harvests and grain self sufficiency policies. In the early and mid 1990s, China imported substantial amounts of Australian wheat. However, Chinese wheat imports were minimal between 1997 and 2001, following changes in government grain reserve management policies and improved yields and good seasons. During this period, AWB acquired a small equity stake in a flour and feed mill operation in Shenzhen and participated in a consortium developing grain handling and storage infrastructure in Guangxi.

AWB Limited believes China's recent entry to the WTO will increase opportunities for wheat exports, particularly through newly-introduced tariff rate quotas. However, the new access arrangements may not instantly increase foreign grains exports as some Chinese grain prices are close to international levels and authorities levy a value added tax on imported grains. However, the Chinese consumer increasingly demands higher quality foodstuffs and the domestic production of higher quality wheat cannot meet this demand. Moreover, WTO entry should boost freedom for private enterprise to source their inputs from the lowest cost providers of quality grains. The AWB believes these are encouraging medium term trends, although Australian grains exporters will face strong competition from Canada and the United States as the Chinese market opens further.

Source: AWB Limited, 2002.

IMPLICATIONS

China's large and increasingly open agricultural sector should provide many trade opportunities for competitive Australian farmers and suppliers of advanced agricultural inputs, technologies and services. Ongoing reforms and WTO entry should reinforce the Chinese agricultural sector's market orientation, increasing production of higher value added, labour intensive products, at the expense of lower value per acre land intensive products in which Australia is competitive. To date, this market driven restructuring has made China into an increasingly successful net food exporter and kept urban food prices low; further restructuring should help boost rural incomes. While the Australian Government and exporters are monitoring carefully China's commitment to implementing its WTO agreements and reducing government intervention in agricultural production and trade, in the long term this trend appears irreversible.

This restructuring and opening of Chinese agriculture should provide a growing medium and long term market for Australian exporters of grains, barley, oil seeds, wool and other broad acre crops and products. Increasing incomes also should boost opportunities for bulk dairy products and other Australian processed food exporters. Finally, as Chinese agriculture continues to upgrade its efficiency, expands into new areas of agricultural production and tackles significant environmental challenges, Australia's world leading agricultural and environmental services, input and technology suppliers should find major new opportunities in the Chinese market.

REFERENCES

- American Chamber of Commerce, 2002, 'Legal Brief – China's New Catalogue Guiding Foreign Investment', www.amcham-China.org.cn, accessed September 2002.
- Australian Bureau of Agricultural and Resource Economics, 2001, *Australian Commodity Statistics 2001*, Canberra.
- , 2002, 'Wood and paper product markets in China: Export potential for Australia', *ABARE Current Issues*, Number 02.4, March 2002, www.abareconomics.com, accessed July 2002.
- Australian Oilseeds Federation, 2002, Information supplied to Economic Analytical Unit, Melbourne, September.
- AWB Limited, 2002, Information supplied to Economic Analytical Unit, Hong Kong, June.
- Beghin, J., 2001, 'The WTO and Dairy Trade Prospects', www.aic.udavis.edu, accessed June 2002.
- Bolling, C., A. Somwaru and F. Crook, 1999, 'U.S. Foreign Direct Investment in China's Processed Food Industry', Washington State University, www.china.wsu.edu, accessed June 2002.
- Bonlac Foods Limited, 2002, Information supplied to Economic Analytical Unit, Melbourne, August.
- BRL Hardy, 2002, Information supplied to Economic Analytical Unit, Adelaide, September.
- CEIC, 2002, CEIC database, supplied by Econdata, Canberra, accessed September 2002.
- Centre of Policy Studies, 2002, Consultancy supplied to Economic Analytical Unit, Melbourne, July.
- Canadian Department of Foreign Affairs and International Trade, 2001a, 'The Processed Food and Beverage Market in China', www.tcm-mec.gc.ca, accessed May 2002.
- , 2001b, 'Primary Agricultural Products and Services in China', www.tcm-mec.gc.ca, accessed May 2002.
- , 2001c, 'The Environmental Industries Market in China', www.tcm-mec.gc.ca, accessed July 2002.
- Chinese National Bureau of Statistics, 2001, *2001 China Statistical Yearbook*, China Statistics Press, Beijing.
- Department of Foreign Affairs and Trade, 2002a, *Agrifood Globalisation and Asia: Volume II – Changing Agrifood Distribution in Asia*, Canberra.
- , 2002b, STARS database, accessed September 2002.
- Deloitte and Touche, 2001a, 'Express China News – January/February 2001', www.deloitte.ca, accessed July 2002.
- , 2001b, 'Express China News – September/October 2001', www.deloitte.ca, accessed July 2002.
- , 2001c, 'Express China News – May/June 2001', www.deloitte.ca, accessed July 2002.

- , 2002a, 'Express China News – January/February 2002', www.deloitte.ca, accessed July 2002.
- , 2002b, 'Express China News – March/April 2002', www.deloitte.ca, accessed July 2002.
- East Asia Analytical Unit, 1997, *China Embraces the Market, Achievements, Challenges and Opportunities*, Department of Foreign Affairs and Trade, Canberra, April.
- Food and Agriculture Organization, 2002, 'FAOStat Agriculture Data', www.fao.org, accessed July 2002.
- GPWA, 2002, Information supplied to Economic Analytical Unit, Perth, June.
- Heritage Seeds, 2002, Information supplied to Economic Analytical Unit, Melbourne, June.
- Ianchovichina, E. and W. Martin, 2001, 'Trade Liberalization in China's Accession to the WTO', March 2001, paper provided to Economic Analytical Unit.
- Knocknagulagh Boer Goat Stud, 2002, Information obtained from website, www.agrisupportonline.com, accessed July 2002.
- Li, C. 2002, Economic Analytical Unit interview with Vice Director, Guangdong Development Research Centre, Guangzhou, March.
- Li, S., 2002, Economic Analytical Unit interview with Director General, Department of Development Strategy and Regional Economy, Development Research Centre of the State Council, Beijing, March.
- Lonergan, S., 2002, 'Beef Mission 2001: Chengdu, Guangzhou, Panyu and Hong Kong, China', www.card.iastate.edu, accessed June 2002.
- Luo, X., 2002, Economic Analytical Unit interview with Country Director, International Development Enterprises, Beijing, March.
- Maruha Corporation, 2002, Information obtained from company website, www.maruha.co.jp, accessed August 2002.
- RAB Australia, 2002, Information supplied to Economic Analytical Unit, Albury, June.
- Rural Development Institute, 2002, 'Country Projects – China', www.rdiland.org, accessed July 2002.
- State Development Planning Commission, 2002, 'Foreign Investment Catalogue', www.sdpc.gov.cn, accessed July 2002.
- TradeData International, 2002, Consultancy supplied to Economic Analytical Unit, Melbourne, June.
- United States-China Business Council, 2001, 'Towards WTO: Highlights of PRC Implementation Efforts to Date – September 2001', www.uschina.org, accessed July 2002.
- US Dairy Exporters Council, 2000, 'China: Expanded Opportunities for US Dairy Exporters', www.usdec.org, accessed June 2002.
- US Department of Agriculture, 2001a, *China: Agriculture in Transition*, www.usda.gov, accessed May 2002.
- , 2001b, 'The Ripening of China's Food Processing Sector', www.atoshanghai.org, accessed

- June 2002.
- , 2002a, *China's Food and Agriculture: Issues for the 21st Century*, www.usda.gov, accessed July 2002.
- , 2002b, 'China Increases Exports of Fresh and Frozen Vegetables to Japan', Economic Research Service, August 2002, www.usda.gov, accessed August 2002.
- , 2002c, 'The Ongoing Reform of Land Tenure Policies in China', *Agricultural Outlook*, September 2002, www.usda.gov, accessed September 2002.
- Wang, J., 2002, Economic Analytical Unit interview with Chairman and Managing Director, Junyao Group, Shanghai, March.
- World Bank, 2001, *China, Air, Land, Water, Environmental Priorities for a New Millennium*, www.worldbank.org, accessed July 2002.
- World Trade Atlas, 2002, *Global Trade Information Service* database, accessed April 2002.
- World Trade Organization, 2001a, *International Trade Statistics 2001*, Geneva, www.wto.org, accessed May 2002.
- , 2001b, *Working Party Report on the Accession of the People's Republic of China*, December 2001, www.wto.org, accessed January 2002.
- , 2001c, 'Products and Services Subject to Price Controls', December 2001, www.wto.org, accessed July 2002.
- , 2001d, 'Most Favoured Nation Tariff – Agricultural Products', December 2001, www.wto.org, accessed July 2002.
- , 2001e, 'Most Favoured Nation Tariff – Tariff Quotas', December 2001, www.wto.org, accessed July 2002.
- , 2001f, 'Staging Matrix for Agricultural Tariffs', December 2001, www.wto.org, accessed July 2002.
- Wu, H. and E.P. Shea, 2002, Consultancy supplied to Economic Analytical Unit by Associate Professor and Lecturer in Economics, Department of Business, Hong Kong Polytechnic University, September.
- Xu, M. and Y. Zhang, 2002, Economic Analytical Unit interview with Professors, Institute of World Economy, Shanghai Academy of Social Sciences, Shanghai, March.

APPENDIX

Table 4A.1

Import Tariff Rate Quotas on Agricultural Products Expanding

Level of Quota, Million tonnes, Import Tariff for In-Quota Imports, Per cent and Non State Trading Share, Per cent, 2002-2004

Commodity	2002	2003	2004
Wheat, meslin and flour - quota	8.468Mt	9.052Mt	9.636Mt
<i>In-quota tariff</i>	<i>1-10 per cent</i>	<i>1-10 per cent</i>	<i>1-10 per cent</i>
<i>Share allocated to non state traders</i>	<i>10 per cent</i>	<i>10 per cent</i>	<i>10 per cent</i>
Rice^a - quota	3.9Mt	4.65Mt	5.32Mt
<i>In-quota tariff</i>	<i>1-9 per cent</i>	<i>1-9 per cent</i>	<i>1-9 per cent</i>
<i>Share allocated to non state traders</i>	<i>50 per cent</i>	<i>50 per cent</i>	<i>50 per cent</i>
Corn and corn flour - quota	5.85Mt	6.525Mt	7.20Mt
<i>In-quota tariff</i>	<i>1-10 per cent</i>	<i>1-10 per cent</i>	<i>1-10 per cent</i>
<i>Share allocated to non state traders</i>	<i>32 per cent</i>	<i>36 per cent</i>	<i>40 per cent</i>
Cane or beet sugar - quota	1.764Mt	1.852Mt	1.945Mt
<i>In-quota tariff</i>	<i>20 per cent</i>	<i>20 per cent</i>	<i>15 per cent</i>
<i>Share allocated to non state traders</i>	<i>30 per cent</i>	<i>30 per cent</i>	<i>30 per cent</i>
Cotton - quota	818.5Kt	856.25Kt	894Kt
<i>In-quota tariff</i>	<i>1 per cent</i>	<i>1 per cent</i>	<i>1 per cent</i>
<i>Share allocated to non state traders</i>	<i>67 per cent</i>	<i>67 per cent</i>	<i>67 per cent</i>
Wool - quota	264.5Kt	275.75Kt	287Kt
<i>In-quota tariff</i>	<i>1 per cent</i>	<i>1 per cent</i>	<i>1 per cent</i>
<i>Share allocated to non state traders^b</i>	<i>Designated trading will be progressively liberalised</i>	<i>Designated trading will be progressively liberalised</i>	<i>Designated trading will be progressively liberalised</i>
Wool tops - quota	72.5Kt	76.25Kt	80Kt
<i>In-quota tariff</i>	<i>3 per cent</i>	<i>3 per cent</i>	<i>3 per cent</i>
<i>Share allocated to non state traders^b</i>	<i>Designated trading will be progressively liberalised</i>	<i>Designated trading will be progressively liberalised</i>	<i>Designated trading will be progressively liberalised</i>
Canola oil^c - quota	878.9Kt	1018.6Kt	1126.6Kt
<i>In-quota tariff</i>	<i>9 per cent</i>	<i>9 per cent</i>	<i>9 per cent</i>
<i>Share allocated to non state traders</i>	<i>66 per cent</i>	<i>74 per cent</i>	<i>82 per cent</i>

- Notes: a This category combines quota for short, medium and long grain rice varieties. Separate quota levels and in-quota tariffs for short and medium grain rice are exactly the same as for long grain rice.
- b While wool remains subject to designated trading, the Chinese authorities committed to ensuring that foreign invested enterprises of any form will be accorded treatment no less favourable than other enterprises in the awarding of wool trading licenses. Designated trading will be progressively liberalised and will be eliminated no later than 1 January 2005.
- c The tariff quota for canola oil will increase further to 1243Kt in 2005. Non state traders will be allocated 90 per cent of the canola oil quota in 2005. Tariff quotas for canola oil (and also soybean and palm oil) will be eliminated on 1 January 2006.

Source: World Trade Organization, 2001d, 2001e.

Table 4A.2

Tariffs on Agricultural Imports Declining

Import Tariffs for Major Agricultural Commodities, Per cent, 2002-2004

Commodity	Prior to WTO entry	1 January 2002 ^b	1 January 2003 ^b	1 January 2004 ^b
Wheat ^a	n.a.	1	1	1
	80	71	68	65
Rice ^a	n.a.	1	1	1
	80	71	68	65
Barley	3	3	3	3
Canola seeds	40	9	9	9
Cane sugar ^a	n.a.	20	20	15
	76	65.9	58	50
Cotton ^a	n.a.	1	1	1
	76	54.4	47.2	40
Wool ^a	n.a.	1	1	1
	38	38	38	38
Beef (boneless)	45	25.2	18.6	12
Sheep meat (boneless)	23	18.2	16.6	15
Pork (frozen carcasses)	20	15.2	13.6	12
Powdered milk and cream ^c	25	17.5	15	12.5
Wine (in bottles)	65	34.4	24.2	14

Note: a This commodity is subject to a tariff rate quota (for volume details, refer Appendix Table 4A.1).

b In these columns, the first tariff shown for each commodity is for in-quota imports and the second tariff refers to above quota imports.

c The tariff on powdered milk and cream falls to 10 per cent on 1 January 2005.

Source: World Trade Organization, 2001d, 2001f.

Table 4A.3

Summary of China's Major WTO Agricultural Commitments

Measure	Commitment	Time frame for implementation
Trade in agricultural goods		
Import tariffs	Progressively cut average agricultural tariffs to 15.7 per cent. (See Appendix Table 4A.2.)	By 2010; most cuts to occur by 2006.
Non-tariff barriers	Tariff rate quotas will replace licensing and quotas on a variety of agricultural products. (See Appendix Table 4A.1.)	Immediate
	Shares in many tariff rate quotas guaranteed to non-state traders	Immediate
	Trading rights opened to all businesses	Progressively by 2005
	All export subsidies eliminated	Immediate
	Domestic agricultural support to be limited to 8.5 per cent of the value of agricultural production	Immediate
	Anti-dumping, subsidies, countervailing measures, technical barriers to trade and sanitary and phytosanitary measures to be brought in line with WTO requirements	Immediate
	Most price controls and all dual trade pricing removed	Immediate
	Uniform administration of trade-related laws to be enforced across China	Immediate
Foreign investment regulations		
FDI caps	Some changes to agricultural investment restrictions. (See Table 4.5.)	Immediate
Trade-related investment measures	Authorities cannot prohibit FDI because it will affect Chinese suppliers	Immediate
	All requirements for foreign exchange balancing, trade balancing, export performance, local content, technology transfer and research eliminated	Immediate

Source: World Trade Organization, 2001b, 2001d, 2001e, 2001f; Economic Analytical Unit calculations.

Immediate Agribusiness Export Opportunities

Economic Analytical Unit commissioned analysis of Australian and Chinese trade data reveals a number of immediate Australian agribusiness export opportunities in China. Using commodity specific Australian agribusiness export prices, Chinese import prices for these commodities, Australian export and Chinese import growth, the size of Chinese markets and Australian export capacity, this analysis identified the potential growth areas for Australian exports of agricultural and food commodities in the Chinese market. A commodity is considered a strong export opportunity if it meets three or more of the four criteria.

This analysis highlights some immediate new opportunities for Australian agribusiness exporters; these opportunities are based on a combination of price and trade growth differentials and established Australian market presence. The analysis also provides an estimate of likely market potential for Australian exporters over a five year horizon. The most prospective commodities are included in Table 4A.4.

Table 4A.4

Immediate Agribusiness Export Opportunities for Australia

TradeData International Analysis of Australian Export Potential in China

Commodity	Ratio of Chinese imports to Australian exports ^a	Australian market share of Chinese imports ^b Per cent	Chinese relative import growth ^c Per cent	Price gap ^d Per cent (US\$ million)	Potential ^e
Meeting all four criteria					
Dog or cat food not for retail sale	35	1	15	247	6.4
Other food preparations of flour and meal	1.1	2	37	0	4.0
Sauces and preparations, excluding soya and tomato sauce, and mixed condiments and seasonings	1.6	1	13	15	2.8
Retail food preparations for infant use, based on flour, meal, starch or malt	6.6	4	193	40	2.6
Cane molasses	3.6	9	32	119	1.4
Retail food preparations not for infant use, based on flour, meal, starch or malt	1.4	2	104	66	0.8
Mushroom spawn, orchids and other live plants	3.7	1	2	-3	0.6
Meeting three of four criteria					
Barley	1.3	55	26	25	25.0
Beer	2.5	0	46	81	3.5
Edible oils	7.6	1	163	-61	3.0
Dried shelled peas	0.5	3	10	-3	1.7
Frozen turkey cuts and offal	14.6	5	152	-8	1.1
Wine-based spirits	8.6	0	115	0	1.3
Chocolate	0.4	6	5	3	1.0
Unfrozen shrimps and prawns	1.8	2	104	-50	0.6
Meeting two of four criteria					
Frozen chicken meat	42.1	1	48	-12	20.5
Rough untreated wood	194.1	0	16	148	31.8

Notes: a The ratio of Chinese imports of the commodity to total Australian exports of the commodity, over the period 1998-2001.
b The share Australian exports in total Chinese imports of the commodity, over the period 1998-2001.
c The difference between Chinese import growth for the commodity and Australian export growth for the commodity, over period 1998-2001.
d The excess of the average Chinese import price over the average Australian export price of the commodity, over the period 1998-2001.
e The potential Australian exports to China of this commodity in year five if Australia were to gain an extra 5 per cent market share over the next five years.

Source: TradeData International, 2002.

OPPORTUNITIES IN MINERALS AND ENERGY

KEY POINTS

- China is a major global consumer, producer and trader in many mineral and energy commodities and Australia is a significant supplier of key minerals like iron ore, alumina and copper ores to China's industries. Australia's recent successful bid for the Guangdong LNG supply contract adds a new dimension to this robustly expanding relationship.
- In recent years, the Government has begun to restructure and consolidate China's minerals and energy sectors, to improve performance and prepare for WTO entry. WTO entry will accelerate this process by further reducing trade barriers, increasing transparency and strengthening the role of commercial decision making.
- Together, mining and minerals processing restructuring, improved trade access and China's strong economic growth will benefit Australian minerals and energy commodity exporters. As well, Australian mining houses and exporters of mining related goods, services and technologies should benefit from mining industry restructuring and expected mining regime liberalisation.
- At present, foreign investment in Chinese mining is minimal, but mineral processing and oil and gas development have attracted more foreign investors. As the mining regime improves, Australian mining investment opportunities should increase, but intending investors need to watch for tangible improvements in the approvals process, the fiscal regime and bureaucratic coordination.

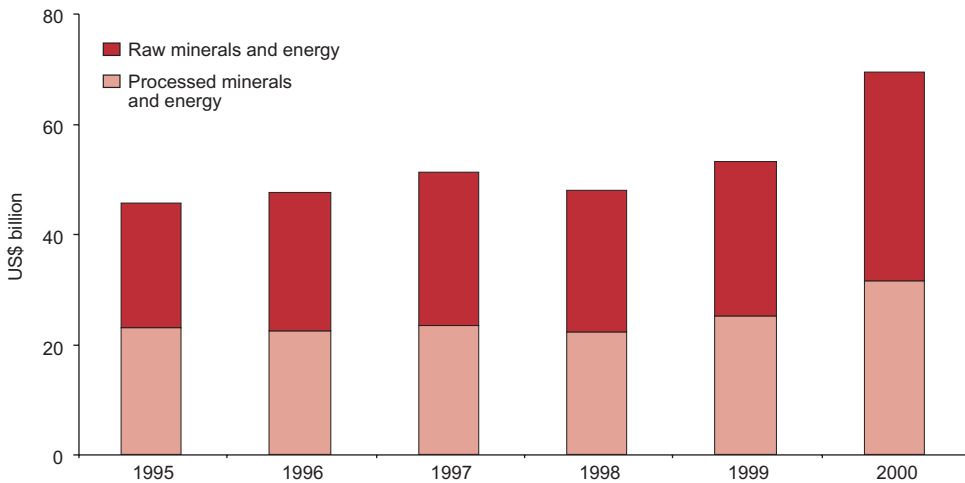
OVERVIEW OF MINERALS AND ENERGY IN CHINA

Reflecting its large land area, growing incomes and considerable mineral resource endowments, China is a significant and increasingly important producer and consumer of mineral and energy resources.¹ In 2000, the sector contributed almost 13 per cent of industrial value added, equivalent to over 6 per cent of GDP (Figure 5.1) (Chinese National Bureau of Statistics, 2001).² China's major mineral and energy outputs include coal, iron ore, non-ferrous metals, steel, crude oil, silver, gold and talc. China also is the world's largest producer of steel and the largest or second largest consumer of coal, iron ore and many non-ferrous metals (Australian Bureau of Agricultural and Resource Economics, 2001; US Department of Energy, 2002; US Geological Service, 2002; Humphreys, 2002).³

Figure 5.1

Mineral and Energy Output Expanding More Strongly Recently

Mineral and Energy Value Added, US\$ billion, Current prices, 1995-2000



Note: Raw minerals and energy includes mining of coal and metals and the extraction of oil and gas. Processed minerals and energy includes smelting of ferrous and non-ferrous metals and petroleum processing and coking.

Sources: Chinese National Bureau of Statistics, 2000, 2001, 2002; CEIC, 2002.

¹ The mineral and energy, or resources, sector includes mining activities, basic metal and mineral processing, and oil and gas extraction and processing.

² As these mineral and energy output figures only measure enterprises above a certain size, the mining output of smaller producers is not accounted for.

³ Analysts estimate China was responsible for about 40 per cent of global growth in copper consumption and 60 per cent of global growth in aluminium consumption between 1990 and 2001 (Humphreys, 2002).

State Still Dominates Sector

State owned and state controlled enterprises still dominate Chinese mining and resource processing. In 2000, state enterprises accounted for 73 per cent of mining and mineral processing value added and over 90 per cent of oil and gas value added (Chinese National Bureau of Statistics, 2001). However, China also has over 150 000 non state mines; typically, these mines are small, inefficient, labour intensive operations and produce only a small share of sectoral output (Humphreys, 2002).⁴ Many thousands of smaller mineral processing facilities also exist, making a more significant contribution to production, although these facilities typically still are very inefficient in size.⁵

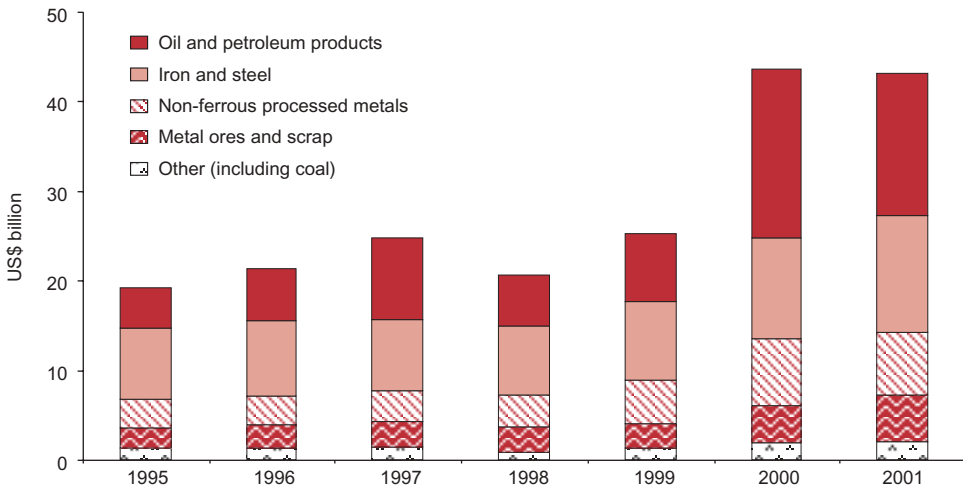
High Trade Exposure, Foreign Investment Less Prominent

China is an increasingly important global mineral and energy trader, importing over US\$44 billion of mineral and energy products in 2001, representing about 20 per cent of Chinese merchandise imports (Figure 5.2). Its major resource imports are petroleum and gas products, high quality iron and steel, metal ores and non-ferrous processed metals.⁶ Through 2000 and 2001, despite higher world oil prices, China imported much larger volumes of crude oil than in previous years (World Trade Atlas, 2002).

Figure 5.2

China A Major and Expanding Importer of Minerals and Energy Commodities

Major Mineral and Energy Imports, US\$ billion, 1995-2001



Source: World Trade Atlas, 2002.

⁴ Data on small scale mining production in China is not readily available; a large part of the small scale mining is for coal and to a lesser extent, gold.

⁵ For example, of 116 aluminium smelters in China, only eight are world scale in size; of 50 copper smelters, only four are world scale; and of 770 lead-zinc smelters, only 11 have a capacity that approaches world scale (Humphreys, 2002).

⁶ China is the world's largest importer of lead ores and second largest importer of iron ore and copper ore after Japan (Australian Bureau of Agricultural and Resource Economics, 2001).

To date, the mining sector has received little foreign direct investment, FDI, due to restrictions on foreign participation and an evolving policy and legal environment. Hence, between 1997 and 2001, mining, quarrying and oil and gas extraction received only 1.6 per cent of China's US\$220 billion in FDI inflows.⁷ To date, most foreign greenfield mining activity has been limited to preliminary studies, exploration and sampling; other mining FDI purchased equity stakes in existing mines and assisted in extending mine life and enhancing mine efficiency. International companies also have invested in related facilities like coal washeries, pipelines, ports and transport infrastructure (Canadian Department of Foreign Affairs and International Trade, 2001a). As a result of the low FDI, in 2000, foreign invested enterprises accounted for only 0.2 per cent of mineral and energy extraction value added (Chinese National Bureau of Statistics, 2001). To date, only one greenfield mine, Sino Gold's Jianchaling gold mine, is majority owned by international interests.

SINO GOLD LIMITED

Sino Gold Limited is an unlisted Australian public company with gold mining interests in China. This company grew out of the Chinese government owned Sino Mining International Limited. A variety of Australian and international investors control the company. To date, Sino Gold is the only internationally managed and operated gold mining company in China. The company currently is restructuring its capital base and will seek listing on the ASX.

Sino Gold's major project is the 95 000 ounce per annum Jianchaling gold mine in Shaanxi province, one of China's largest gold mines. The company also is exploring opportunities in Guizhou and Sichuan Provinces. Sino Gold combines international expertise and environmental management technologies with Chinese skills and material inputs to achieve high productivity and low operating costs.

Sino Gold is encouraged by China's expanding mining opportunities and developing business environment, including the gradual deregulation of the gold market. The Government is reforming important laws dealing with mining tenure, licences and exploration, making it easier to secure relevant licences and approvals. Furthermore, WTO entry and the Government's "Go West" policy of encouraging FDI in the western provinces are improving attitudes towards using foreign capital to develop mineral and energy resources. In particular, local communities increasingly welcome foreign investment, including offering fiscal and infrastructure provision incentives. Sino Gold is very positive about the medium term future of resource development in China.

Source: Sino Gold Limited, 2002.

⁷ The Ministry of Land and Resources indicates, in the late 1990s, the bulk of this FDI was concentrated in oil and gas exploration and production (China.org, 2000).

In contrast to mining activities, major international mineral processing firms increasingly participate in China, typically through taking equity stakes or forming joint ventures with Chinese mineral processing firms. More recently, some international firms also established wholly foreign owned greenfield mineral processing plants. Industries with increasing foreign investment include aluminium (Alcoa, Pechiney), other base metals (Sumitomo, Outokompu) and iron and steel (Pohang Iron and Steel Corporation, Mitsubishi, BHP Steel and Marubeni). Although figures for FDI in these sectors are not separately available, in 2000, foreign funded enterprises accounted for 6.5 per cent of value added in mineral processing activities (Chinese National Bureau of Statistics, 2001).

Because it is more open to foreign participation, the oil and gas sector, particularly off shore exploration and production, also has attracted more foreign investor interest than mining.⁸ As a result, in 2000, foreign invested enterprises accounted for about 6 per cent of oil and gas value added (Chinese National Bureau of Statistics, 2001). Global oil majors like ChevronTexaco, Agip, Phillips, BP, Shell, Exxon and a host of smaller international oil firms are active in oil and gas exploration and production in China (US Department of Energy, 2002). These firms operate in partnerships with Chinese firms, investing in oil exploration, petrochemical refining and petrol retailing ventures (Canadian Department of Foreign Affairs and International Trade, 2001b; George, 2002). Following listings in 2000 and 2001, major foreign oil companies also now hold small equity stakes in Sinopec and PetroChina.⁹ Oil and gas consultancy and pipeline development also are increasingly popular areas for foreign involvement (US Department of Commerce, 2002).

RECENT MINERAL AND ENERGY REFORMS

From the mid 1990s, the Chinese Government increased the pace of mining and processing reforms, to prepare for stronger competition and boost efficiency. Reforms included:

- rationalising the mining bureaucracy and merging key agencies
- corporatising, closing, merging or listing major state owned miners and mineral processors, to increase their exposure to commercial pressures
- closing or consolidating thousands of smaller inefficient mines¹⁰
- improving mining infrastructure, including road, rail and ports
- improving mine safety, establishing a Bureau of Work Safety and legislating for safe workplaces and miner insurance (Steen, 2002)¹¹

⁸ China has welcomed foreign investment in offshore oil and gas development since the early 1980s and onshore development since the mid 1980s. However, this participation was very strictly controlled until the mid 1990s (Asia Research Centre, 2001).

⁹ BP Amoco holds a 2.2 per cent share in PetroChina, representing just over one-fifth of PetroChina's traded stock; ExxonMobil and Shell together hold over 5 per cent of Sinopec's shares (Sinopec, 2001).

¹⁰ For example, from 1997 to 2002, 60 000 small coal mines were closed (*China Daily*, www.chinadaily.com.cn, 10 April 2002).

¹¹ Encouragingly, these efforts may be having some positive effects, with coalmine deaths falling by 405 to 5395 in 2001 (Steen, 2002). However, coalmine deaths in the early part of 2002 were 13 per cent higher than the same period of 2001 (*BBC News*, www.news.bbc.co.uk, 10 April 2002).

- improving environmental management by closing down a number of large heavy polluting metal processing facilities (US Geological Service, 2000)¹²
- freeing up mining trade regulations, cutting import tariffs on a broad range of mineral commodities and reducing tariffs on aluminium, lead, steel, titanium and zinc to under 10 per cent by the early 2000s
- partially opening the coal mining sector and allowing some FDI in iron ore, manganese ore, alumina, copper, lead and tin mining.

RECENT CHANGES TO CHINA'S MINING REGIME

In the late 1990s, China embarked on a series of reforms to encourage private and foreign participation in its mining sector. In 1997, the Government amended the Mineral Resources Law to allow local governments more autonomy in approving projects and transferring mining rights and leases. In January 1998, the Government made encouraging changes to laws relating to mining exploration, lease registration and lease transfers. In 1999 and 2000, it also strengthened laws concerning mineral and mining land use rights, boosting foreign investors' access to prospecting and exploration rights, allowing foreign shareholdings in medium and large processing enterprises and making approval procedures more open to foreign investors.

In the early 2000s, the Government increased the pace of mining regime reform. It gave resource-rich Yunnan province the provisional right to approve, register and issue foreign mining investment licences. After Yunnan officials developed a successful incentive package to attract foreign investment in 1999 and 2000, the Ministry of Land and Natural Resources extended this model nationwide. However, foreign investors still need central authorities' approvals for large project development.

In December 2000, Chinese authorities released a discussion paper on FDI in mining.¹³ New guidelines in this paper recommend increasing the speed and reducing the complexity of mineral development approvals, relaxing business structure requirements, increasing foreign investors' rights to access, purchase and transfer exploration and mining rights, allowing the inclusion of technology and equipment as capital and improving tax and import duty treatment. However, the Government is yet to write these guidelines into law.

Sources: Canadian Department of Foreign Affairs and International Trade, 2001a, 2001b; Perkins Coie, 2002; China Legal Change, 2000.

¹² However, poor technology and widespread illegal mining continue to cause serious environmental problems such as waste gas emissions and residues, powdered ashes and acid rain (Ministry of Land and Resources, 2002).

¹³ This paper is called "Several Opinions Concerning Further Encouragement of Foreign Investment in Mineral Resources Other than Oil and Gas".

WTO ENTRY IMPACTS ON MINERALS AND ENERGY

In entering the WTO, China committed to further reduce resource import tariffs and bind them at very low rates; details of some key tariff commitments are given in Appendix Table 5A.2. China also agreed to immediately abolish export subsidies and remove other non tariff barriers; in particular, China guaranteed that non-state traders would receive increasing oil and petroleum import quotas and its state trading companies would purchase minerals and energy imports based on commercial criteria (Appendix Table 5A.1, Appendix Table 5A.3).¹⁴

These reforms will improve Australian exporters' competitiveness, increase trade transparency and predictability and limit state influence on commodity trading, while also reinforcing pressures for reform in the mineral and energy industries. Although China did not commit to liberalise mineral and energy FDI under its accession agreement, in early 2002, the Chinese authorities released a revised list of foreign investment guidelines that further liberalised FDI in some minerals and energy sectors (Appendix Table 5A.7).

Modelled Impacts of WTO Entry

China is expected to benefit significantly from WTO related reforms to its minerals and energy trading regimes. Increased access to lower cost, higher quality imported resource commodities and increased competition should improve the efficiency of local mineral and energy processors and increase the welfare of end-users. These pressures also should boost demand for imported technologies, services, goods and capital to improve resource sector competitiveness. Economic Analytical Unit commissioned modelling forecasts China's WTO accession will boost resource imports by more than US\$25 billion to almost US\$160 billion in 2010, as well as boost output (Table 5.1, Appendix 5A.4) (Centre of Policy Studies, 2002).

¹⁴ However, China retains the right to maintain state trading for major mineral exports including tungsten ores and derivatives, coking and steaming coal, antimony ores and products and silver.

Table 5.1

WTO Entry to Boost Mineral and Energy Imports

Forecast Mineral and Energy Imports Value Added, Growth Rate and Level, Per cent and US\$ billion, 2000-2010

	Average annual value added growth rates without WTO entry 2000-2010	Change in annual growth rates due to WTO entry 2000-2010	Absolute level of value added without WTO entry in 2010	Change in absolute level of value added due to WTO entry in 2010
	per cent	percentage points	US\$ billion, 2000 prices	US\$ billion, 2000 prices
Mineral and energy imports	11.5	2.0	134.2	25.5
Coal	21.4	6.5	0.5	0.3
Natural gas	20.6	2.9	0.6	0.2
Ferrous metal ores	14.0	2.9	4.8	1.4
Non-ferrous metal ores	20.1	5.7	2.1	1.2
Other mining	11.1	2.3	91.8	20.5
Iron and steel	11.6	0.2	20.8	0.4
Non-ferrous metal products	11.9	1.2	13.7	1.5

- Note:
- a The first column shows forecast growth in the nominated mineral and energy imports over the next ten years if China did not enter the WTO.
 - b The second column shows how the growth trend is predicted to change as a result of China entering the WTO. For example, the average annual growth rate of mineral and energy imports is likely to be 2.0 percentage points higher during each of the ten years following China's entry to the WTO.
 - c The third column shows the forecast size of Chinese mineral and energy imports in year 2000 US\$ billion prices in 2010 if China did not enter the WTO.
 - d The fourth column shows the forecast gain in size of Chinese mineral and energy imports in year 2000 US\$ billion prices in 2010 as a result of China entering the WTO. For example, total mineral and energy imports will be US\$25.5 billion higher in 2010 than otherwise.

Sources: Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

AUSTRALIAN RESOURCE TRADE OPPORTUNITIES

China already is Australia's third largest resource exports customer. (See Chapter 3 – *Australia-China Business*.) WTO entry, industry restructuring, China's relatively low per capita resource endowments and burgeoning industrial and household demand should spur rapid growth in China's mineral and energy imports. This should underpin further increases in Australian resource commodity exports to China. Importantly, China's ambitious mining sector restructuring also should generate significant opportunities for Australian suppliers of advanced mining related services and technology to improve Chinese minerals competitiveness.

CURRENT RESOURCE EXPORT OPPORTUNITIES

The Economic Analytical Unit commissioned a Melbourne based firm, TradeData International, to analyse Australia's current trade opportunities in China for this report. Using detailed data on Australian and Chinese resource export and import prices and growth, Chinese market size and Australian export capacity, they identified potential opportunities for Australian resource exports to China.

This analysis highlights some immediate new opportunities for Australian resource exporters. It also provides an estimate of the likely market potential for Australian exporters over the next five years. The most prospective opportunities are included in Appendix Table 5A.5.

Metal Ores

In the short term, Australia's position as an efficient, low cost and relatively close resource producer means metal ores, particularly iron ore, alumina and copper ores, will continue to be the mainstay of Australia's exports to China. Import growth will be most rapid for ores whose domestic supplies are dwindling, which have high extraction costs or are of low quality, particularly iron, copper, lead, zinc, manganese and alumina (Ministry of Land and Resources, 2002). (For details of China's major mineral reserves, see Appendix Table 5A.6.)

Continuing strong increases in iron ore demand will underpin Australian minerals export growth to China; Economic Analytical Unit commissioned modelling indicates WTO entry will increase annual growth in China's demand for iron ore imports from 14 per cent to 16.9 per cent over the next ten years, potentially quadrupling imports by 2010 (Table 5.1).¹⁵ As China has been responsible for a disproportionately large part of global base metal demand growth over the last decade, its continuing development, income growth, industrial restructuring and improved trade access will generate further strong increases in non-ferrous metal ore demand, potentially expanding this already important market to over US\$3 billion by 2010 (Humphreys, 2002; Table 5.1).

¹⁵ Prominent minerals analysts point to the particularly low quality of Chinese iron ore as an important factor in driving current and future demand (Humphreys, 2002).

BHP BILLITON

BHP Billiton, one of the world's largest diversified resource companies, has a long history in China, first exporting lead to Fuzhou in 1891. However, it was not until the 1960s and 1970s that BHP Billiton commenced regular business with China, exporting steel and various minerals products. In the late 1970s, BHP signed an oil exploration contract with China and in the mid 1980s, began investigating mineral exploration possibilities. BHP Steel, recently spun-off from BHP Billiton, successfully operates two roll-forming plants in Guangzhou and Shanghai, established in the mid 1990s.

Today, BHP Billiton's main business with China is exporting iron ore, although the company also exports copper concentrates from South America, hot briquetted iron and alumina from Australia and small amounts of steaming coal from South Africa. To date, it has entered only the preliminary stages of minerals exploration at various sites in China; exploration policy, mining laws and the general business environment still are evolving and make long-term mining investment complicated to develop and commercially difficult to justify. Nevertheless, China's considerable mineral wealth and rapidly growing need for higher quality industrial inputs make it an increasingly attractive and important market for both export and direct investment opportunities.

Source: BHP Billiton, 2002.

Coal

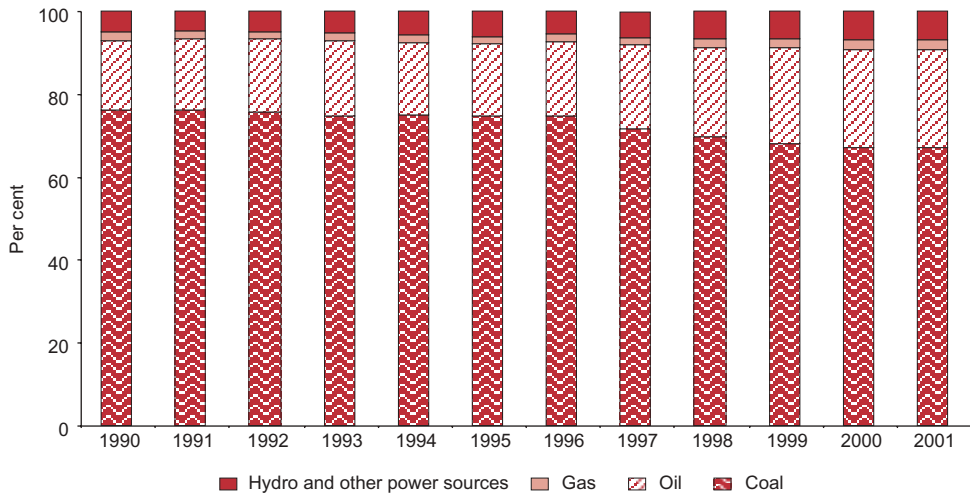
Due to its immense coal reserves, large domestic production capacity and ongoing subsidies for domestic coal, China is not a major coal importer.¹⁶ The vast bulk of its recoverable coal reserves are steaming coal, although these typically are found in deep and thin underground seams, requiring underground mining (International Energy Agency, 1999; Australian Bureau of Agricultural and Resource Economics, 1999). China's coking coal reserves, while also large, are further from major centres and harder to extract; as a result, China's production of coking coal is much smaller than its steaming coal output (US Department of Energy, 2002). Although coal continues to meet the vast bulk of China's energy needs, its share of energy consumption is falling (Figure 5.3).

¹⁶ The coal industry is the largest recipient of subsidies in the Chinese economy; these subsidies are provided both directly to coal producers, particularly to offset ongoing losses and provide debt and tax relief, and also through subsidisation of coal transport. While coal pricing effectively is market determined, this subsidisation means coal producers in the north of China can deliver coal to their customers elsewhere at prices perhaps less than the real cost of production (Australian Bureau of Agricultural and Resource Economics, 1999).

Figure 5.3

Coal Less Prominent as a Source of Energy Production

China's Energy Sources, Major Fuels' Share of Total Energy Production, Per cent, 1990-2001



Source: CEIC, 2002.

Currently, China imports relatively small quantities of steaming coal from South Africa, Indonesia and Australia and some coking coal from Australia and New Zealand; in recent years these rarely exceeded US\$100 million (International Energy Agency, 1999; BHP Billiton, 2002; CEIC, 2002). However, modelling for this report anticipates Chinese coal imports will increase from this low base over the next decade, with WTO entry accelerating this growth (Table 5.1).

Nevertheless, government support of the coal sector remains a critical determinant of China's future coal trade behaviour. While removal of all explicit and implicit subsidies and import barriers would likely boost coal imports even more than this forecast, most analysts expect China to remain a significant exporter of steaming coal over the medium term (Australian Bureau of Agricultural and Resource Economics, 1999; US Department of Energy, 2002). Export opportunities for Australian producers consequently will remain limited. However, China's ongoing drive to produce higher quality iron and steel products will boost its demand for specialised, high quality coking coal (Australian Bureau of Agricultural and Resource Economics, 2002). Given China's more difficult to extract reserves of coking coal, this may lead to Australian coking coal producers securing larger markets over the medium term.

CHINA'S TRADE IN COAL

China is a volatile international coal trader. Between 1994 and 1997, China annually exported about US\$1.6 billion, 30 to 35 million tonnes, of coal on average. However, by 2001, China more than doubled its total exports of coal, coke and briquettes to over US\$3.5 billion, 90 million tonnes, becoming the second largest steaming coal exporter in the world after Australia. These expanded coal and coke exports mainly went to China's traditional coal customers in North East Asia.¹⁷

Several factors drove the sharp rise in Chinese coal exports. Through the mid and late 1990s, China built up large stocks of coal as domestic demand slumped due to industrial restructuring, improved energy efficiency and a switch away from coal as a household fuel. In an attempt to bring down burgeoning stocks, the Chinese authorities increased coal washing, built dedicated transport and port links for large coal mines, began shutting down thousands of inefficient smaller coal mines and reduced export taxes on coal. This improved incentives to export and stimulated the dramatic surge in coal exports.

Recent figures suggest Chinese coal exports remain high and are likely to exceed US\$3 billion, 70 million tonnes, for the 2002 calendar year. However, China's coal imports also increased strongly in the early months of 2002. Anecdotal evidence suggests, by early 2002, China had run down its coal stockpiles and domestic coal price rises boosted demand for imported steaming coal. Most imports went to southern Chinese consumers who are situated a long distance from the major coal supplies of the north.

Forecasts of China's future role as a coal trader depend critically on Chinese economic growth rates, the intensity and efficiency of coal use and government policy. Falling stocks combined with recent production cuts and an increase in domestic consumption suggests China's presence in international export coal markets could decline over the next few years. WTO accession will increase commercial pressures on Chinese coal producers; moreover, authorities, under WTO, committed to eliminate export subsidies, possibly further moderating coal exports. However, government intervention will remain an important influence on coal sector performance, and other prominent analysts suggest China may remain a significant coal exporter in the medium term, selling between 120 and 130 million tonnes of steaming coal to Asia per year (US Department of Energy, 2002).¹⁸

Sources: Australian Bureau of Agricultural and Resource Economics, 1999, 2001; International Energy Agency, 1999; CEIC, 2002; World Trade Atlas, 2002; Schneider et al., 2002; US Department of Energy, 2002; Centre of Policy Studies, 2002.

¹⁷ These markets, particularly Japan, Republic of Korea and Taiwan, also are Australia's major coal customers.

¹⁸ China's large domestic reserves and ambitious investment plans indicate this is possible, but such an outcome may be constrained by China's poorer quality and difficult to extract reserves.

Processed Metals

China currently purchases moderate quantities of Australian processed metals, including aluminium, refined copper, simply transformed copper products and direct reduced iron. (See Chapter 3 – *Australia-China Business*.) However, China currently is developing significant new domestic metals smelting and processing capacity and upgrading old facilities (Canadian Department of Foreign Affairs and International Trade, 2001b). Hence, in the medium term, ore imports may replace many of these metal imports. Modelling commissioned for this report anticipates Chinese imports of metal ores should grow much more quickly than processed metal imports, although the latter will remain large in absolute terms (Table 5.1).

MIM HOLDINGS

MIM Holdings, the Australian based coal and base metal producer, is increasing its market presence supplying advanced mineral processing technology to China. Chinese mineral processing firms are under increasing pressure to improve profits and environmental outcomes and are looking to purchase world class, cost efficient mining, smelting and refining technologies. MIM, with strong expertise and advanced technologies, is a natural partner for many Chinese firms. For example, MIM's refining technology, ISAPROCESS, accounts for over one-third of total installed global copper refining capacity. In the late 1990s, responding to trade enquiries and some initial marketing efforts, MIM began to build relationships with Chinese mining and smelting state owned enterprises.

MIM currently is completing a contract to install its ISASMELT technology at Yunnan Copper. This contract involves supplying the technology licence, engineering and construction services and extensive training services in both China and Australia. MIM also advised Yunnan Copper on upgrading its raw materials, storage, controls, electric furnace and oxygen plant technologies. MIM is in the earlier stages of a similar contract with Yunnan Metallurgical Group for a lead smelter; it also is installing its ISAPROCESS refining technology in Guixi and is negotiating with other minerals groups. This set of business relationships makes China one of MIM's most important technology markets.

MIM has learnt the importance of relationship building in China. They have developed successful partnerships based on their capacity as an integrated minerals company, able to assist in all areas including mining, processing, technology supply and exporting; this 'sister company' image has been a key to their success. They have developed a sound understanding of the Chinese business and operating environment and continue to participate in numerous seminars and information sessions to gain profile. MIM also have found it important to start commercial relationships on a clearly understood and well-defined basis to avoid difficulties down the track.

Source: MIM Holdings, 2002.

China's industrial restructuring also opens other opportunities for Australia. As local metal processors face further international competition, corporatise and consolidate, they will demand more foreign services and technologies. Australia's metal processing sector has developed many related services and technologies which could find markets in China.

Oil and Gas

China is a major global oil and petroleum producer and trader, producing about 60 per cent of its current oil needs and almost all of its current gas needs (Figure 5.4). It imports substantial crude oil volumes from the Middle East and Indonesia and exports processed products to East Asian markets. Despite its small current gas consumption, China also is gearing up to become a substantial gas user. It is planning to build gas pipelines from Central Asia to China's east coast, is constructing a liquefied natural gas, LNG, terminal in Guangdong and preparing a similar project in Fujian. Australia exports small amounts of specialised crude oil, processed petroleum products and liquefied propane and butane to China, but because of supply constraints, is unlikely to become a significant supplier of other oil and petroleum products.

However, by winning the major liquefied natural gas contract to supply the Guangdong LNG terminal, Australia is set to be a major LNG supplier to China. From 2005, the North West Shelf project will export over three million tonnes of LNG per annum in a contract likely to be worth between \$750 million and \$1 billion annually.¹⁹

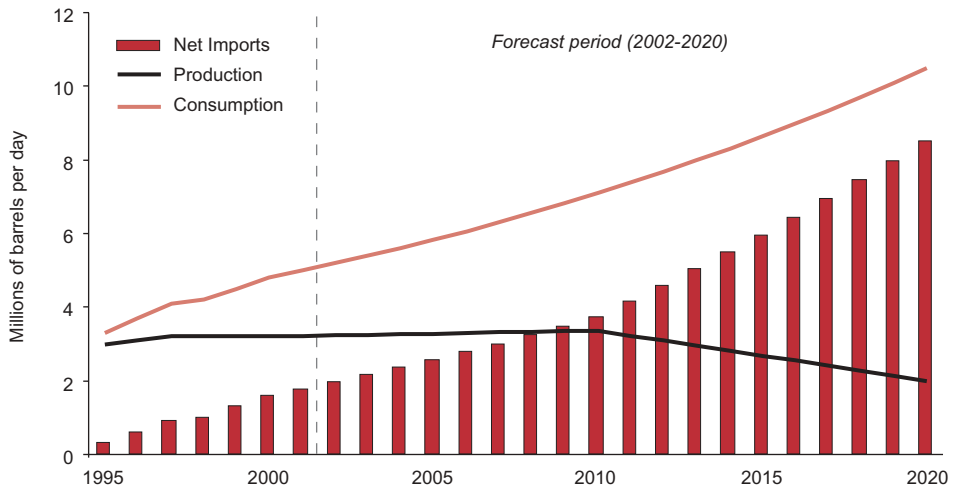
On current trends, China's medium term oil demand will significantly outstrip domestic supplies, potentially making it the largest global importer of crude oil products by 2020 (Figure 5.4) (International Energy Agency, 2000; Australian Bureau of Agricultural and Resource Economics, 2001; US Department of Energy, 2002). To avert this potential drain on future foreign exchange, China has approved significant investment in the domestic oil sector and is encouraging strategic partnerships between China's three large oil groups and global oil majors to develop new domestic fields and prolong the life of existing sites. China's large oil companies also are investing in oil production facilities overseas. (See Chapter 3 – *Australia-China Business*.)

¹⁹ Modelling commissioned for this report suggests WTO entry will expand Chinese imports of natural gas by around US\$160 million in 2010, bringing total imports to US\$750 million (Table 5.1) (Centre of Policy Studies, 2002). However, this modelling does not account for the authorities' plans to switch into gas; if this policy succeeds, potential commercial opportunities for Australian gas producers will be much higher. Successful development of gas markets in China will require substantial investment in infrastructure and institutions.

Figure 5.4

Chinese Oil Consumption and Net Imports To Grow Strongly

China's Oil Consumption, Production and Net Imports, Millions of barrels per day, Actual and forecast, 1995-2020



Notes: Net imports are calculated as the gap between Chinese consumption and production. Forecasts for Chinese crude oil consumption are taken from US Department of Energy, 2002. Forecasts of Chinese crude oil production are taken from International Energy Agency, 2000.

Sources: International Energy Agency, 2000; Australian Bureau of Agricultural and Resource Economics, 2001; US Department of Energy, 2002.

NATURAL GAS IN THE CHINESE ENERGY MIX

Recognising the significant and increasing environmental damage from burning coal and oil, China aims to increase the share of cleaner fuels like natural gas in total energy consumption from its current level of less than 3 per cent (Figure 5.3). By 2005, authorities plan to double annual gas consumption from its year 2000 level of 25 billion cubic metres per year and almost double it again by 2010, potentially pushing its share of energy consumption to around 6 per cent by 2010. This implies annual growth in Chinese gas demand of almost 15 per cent over the period.

If such demand growth eventuates, it will significantly outstrip current annual Chinese natural gas production of 30 billion cubic metres, which since the mid 1990s has grown at about 9 to 10 per cent per annum. Although China has sizeable domestic gas reserves, developing these projects is expensive, challenging and time consuming, meaning almost all of the planned short and medium term increase in gas consumption must come from imports.

Sources: International Energy Agency, 2000; Asia Research Centre, 2001; World Bank, 2001; US Department of Energy, 2001; BP, 2002; CEIC, 2002;

Mining and Processing Equipment and Services

As China's mining industry and metals groups seek to expand, improve productivity and reduce pollution, Australian businesses should find good opportunities in exporting mining, processing and smelting equipment, related goods, services and technologies. Australian miners have substantial capacity to develop minerals projects and supply related equipment, infrastructure and services to isolated regions with difficult geographic and climactic challenges, all relevant to developing mining in China's resource rich but isolated and poorly serviced Western provinces.

For example, Australia's world class export coal industry has developed strong competitiveness in supplying related equipment, services and technologies. As the Chinese coal industry continues to restructure and modernise, Australian firms can assist Chinese companies in developing washeries and by supplying specialised infrastructure including coal slurry pipelines and bulk port loading facilities, mine design services, innovative mining equipment, mining software and productivity enhancing mining technologies. Australia also has developed other highly innovative products, technologies and services to assist mineral processing operations.

SURPAC

Perth based Surpac, a leading Australian developer of mining, engineering, geological modelling and environmental software, has been active in China since late 1999. More than half of Surpac's revenues come from its well established client base of over 3 000 users spread across 94 countries. To service these markets, Surpac has offices in Canada, Chile, India, South Africa and the United Kingdom.

Surpac entered China through a partnership with another Australian company with many years' experience operating in China. To date, Surpac has secured some early business in the gold industry and received expressions of interest from the coal, base metals and industrial minerals mining companies. Surpac's products also have attracted interest from authorities responsible for water resources, including those overseeing the Three Gorges Dam project.

Surpac finds China a reasonably challenging market in which to operate, requiring substantial investment in time and working capital for businesses to succeed. They find an important ingredient of any success is a company's ability to build strong relationships with key customers and industry partners. This in turn requires a very sound knowledge of the market, the differences in business culture and of the corporate framework in which foreign entities must operate. However, Surpac believes the mining sector's substantial ongoing restructuring and consolidation creates an exciting new market in which strong ongoing business appears very likely.

Source: Surpac, 2002.

AUSTRALIAN RESOURCE INVESTMENT OPPORTUNITIES

To date, China's mining FDI regime has not encouraged strong international greenfield investment. However, the gradually liberalising FDI regime for mining, oil and gas and mineral and energy processing is boosting previously low levels of mining foreign direct investment; inflows increased 39 per cent to US\$811 million in 2001. This followed several years when mining FDI inflows stagnated at between US\$500 million and US\$600 million (CEIC, 2002). This positive development indicates recent changes to laws and government policy gradually are translating into increased investor interest.

The authorities recently released an updated and expanded list of mineral and energy sectors approved for foreign participation and are using fiscal and infrastructure provision incentives to encourage mining development in the mineral-rich western provinces (Appendix Table 5A.6, Appendix Table 5A.7). International mining houses remain very interested in China's prospectivity in certain minerals, its burgeoning raw mineral needs and its proximity to other key North East Asian markets.

WMC LIMITED

WMC Limited, a major global minerals explorer and producer with business interests in 16 countries, has exported Olympic Dam copper cathode to major Chinese copper rod and cable manufacturers since 1999. WMC also has exported nickel to China since 2001.

In the late 1990s, WMC began building key relationships and developing mining joint ventures in China. It established a gold exploration venture in Xinjiang Autonomous Region and began exploring world class nickel deposits in southern China. In July 2000, WMC signed two nickel exploration and mining joint ventures in Yunnan province with government-associated entities. WMC also established a service company in Xinjiang to provide technical, logistical and management support services in China.

WMC believes China is a promising base metal export market, with expanding nickel use and a shortfall in Chinese production of copper feedstock underpinning demand. WMC find that a lack of written regulations and transparency in applying rules and regulations makes doing business difficult. However, WMC is encouraged by the direction of change in the business environment and the mining regime and by the strong support Chinese authorities give to foreign investment.

Source: WMC Limited, 2002.

However, stronger Australian mining FDI inflows await a more stable and workable mining regime. Required business structures often are unsuitable and many laws pertaining to mining and minerals development are still evolving and challenging to navigate. Obtaining exploration data, approvals and permits and progressing to prospecting and mining is a time consuming and difficult process (Humphreys, 2002; Canadian Department of Foreign Affairs and International Trade, 2001a, 2001b; Perkins Coie, 2002; Australia-Canada International Mining Working Group, 2002a, 2002b). Coordination between central and provincial ministries also is lacking; many of these challenges relate to unclear inter-ministry or inter-jurisdictional responsibility (Australia-Canada International Mining Working Group, 2002a, 2002b; Canadian Department of Foreign Affairs and International Trade, 2001b).²⁰ An overarching concern is that the FDI approvals process is geared to industries like light manufacturing with lower risks, lower costs to reach feasibility and lower capital requirements (Australia-Canada International Mining Working Group, 2002a, 2002b). Also, amortisation schedules for development costs and treatment of carryback and intangible assets generally are not favourable (Australia-Canada International Mining Working Group, 2002a, 2002b).²¹

Australian mining investors will watch for progress on key issues including better coordination between ministries and different levels of government, a speedier and more predictable approvals process, a more internationally competitive fiscal regime and more certainty of policy and title.

Australian companies may find more promising short term opportunities in minerals processing and oil and gas drilling; already, many international firms are present in these sectors, with the regime governing them somewhat more settled. As well, the Government particularly encourages investment in higher value added and specialised processing activities, including alloys, non ferrous composites, rare earth applications and a variety of niche steel products (Appendix Table 5A.7). Strong domestic income growth and burgeoning demand for higher value industrial inputs should underpin demand for the output of such ventures.

²⁰ The desire for investment at the local level is sometimes not matched by similar enthusiasm at the central level (Canadian Department of Foreign Affairs and International Trade, 2001b).

²¹ Some analysts also suggest the Chinese mining fiscal regime is not particularly attractive (Lee, 2001). Royalty and VAT taxes are based on gross revenues and are set at quite high rates, largely due to low expectations that taxes will be collected (Lee, 2001). For example, royalties are set at 2 per cent of gross revenues for the central government and local governments typically impose royalties of an extra 0.5-1 per cent tax on gross revenue; the Government also charges an effective VAT of 7-9 per cent (Lee, 2001). In addition, the authorities charge a resource compensation tax of 3 per cent for gold mining.

BHP STEEL

BHP Steel has been involved in mainland China since 1991, when it established a sales operation supported from Hong Kong. In 1995, it established two roll-forming manufacturing businesses in Shanghai and Guangzhou, supported by a network of 18 sales offices throughout northern and southern China. These two businesses supply high quality steel products to the premium end of the construction market, focussing on infrastructure and industrial customers. Increasing Chinese demand for quality products provides a sound and growing base for these ventures. BHP Steel now is regarded as an industry leader, supporting domestic design institutes and architects constructing facilities such as the new Beijing Airport terminal and the Guangzhou National Sports Stadium, arguably the most spectacular stadium design in the world.

In establishing its Chinese plants, BHP Steel learnt some important lessons in terms of market segmentation, branding and strong product differentiation. Looking ahead, BHP Steel has plans for further expansion. Two new plants are under construction, the first in Beijing, which will supply some of the enormous demand expected to flow from Olympics related construction and infrastructure. The second factory is in Chengdu in Sichuan province, one of the fastest growing regions in China. The current and future market potential is immense and BHP Steel looks set to continue expanding its well researched and successful ventures.

Source: BHP Steel, 2002.

IMPLICATIONS

Australia is an important supplier of mineral and energy resources to China's large and increasingly globally integrated minerals and energy sector. Recent reforms and WTO entry impacts are reshaping the minerals, energy and minerals processing sectors, making them more price responsive and encouraging rationalisation and technological upgrading. These developments are expanding opportunities for Australian miners and processors and suppliers of associated services and technologies.

While iron ore, alumina and copper ore should remain Australia's largest mineral exports to China, as Chinese minerals and energy demand increases and its domestic supplies dwindle, other opportunities also will emerge. Ongoing restructuring, driven by increased competition and environmental concerns should boost opportunities for Australian exporters of other base metal ores such as zinc and lead and advanced technologies and services. Liquefied natural gas is set to become a major Australian export; this market should continue to expand rapidly as China moves towards cleaner sources of fuel for its industrial expansion and growing household demand. Modest coal export opportunities also may emerge if China's coal sector investment lags demand growth, but developments here critically depend on the direction of future government policy.

Although China has made some important changes to its mining laws and regulations since the late 1990s, many potential investors will monitor progress in key areas including the fiscal regime, the approvals process, certainty of title and bureaucratic coordination before committing to major projects. At present, mining FDI remains challenging. However, investment in oil and gas production and minerals processing offer greater opportunities, as the regimes governing foreign participation in these sectors are more settled. Associated environmental, design, IT and other advanced mining and processing services also have good prospects.

REFERENCES

- American Chamber of Commerce, 2002, 'Legal Brief – China's New Catalogue Guiding Foreign Investment', www.amcham-China.org.cn, accessed September 2002.
- Asia Research Centre, 2001, *China: Energy Policy and Natural Gas Use*, September 2001, Murdoch University, Perth.
- Australian Bureau of Agricultural and Resource Economics, 1999, *Supplying Coal to South East China, Impacts of China's Market Liberalisation*, ABARE Research Report 99.13, Canberra.
- , 2001, *Australian Commodity Statistics 2001*, Canberra.
- , 2002, 'China to dominate growth in world iron ore and steel markets', ABARE Outlook 2002 Conference Proceedings, www.abareconomics.com, accessed July 2002.
- Australia-Canada International Mining Working Group, 2002a, 'Current Approvals Processes', Information supplied to Economic Analytical Unit, Beijing, July.
- , 2002b, 'Taxation Issues for Mining Companies in China', Information supplied to Economic Analytical Unit, Beijing, July.
- BHP Billiton, 2002, Information supplied to the Economic Analytical Unit, Beijing and Melbourne, July.
- BHP Steel, 2002, Information supplied to the Economic Analytical Unit, Shanghai, July.
- BP, 2002, 'Statistical Review of World Energy 2002', www.bp.com, accessed August 2002.
- Canadian Department of Foreign Affairs and International Trade, 2001a, 'The Mining Industry in China', www.tcm-mec.gc.ca, accessed May 2002.
- , 2001b, 'The Oil and Gas Industry in China', www.tcm-mec.gc.ca, accessed May 2002.
- CEIC, 2002, CEIC database, supplied by Econdata, Canberra, accessed August 2002.
- Centre of Policy Studies, 2002, Consultancy supplied to Economic Analytical Unit, Melbourne, May.
- China Legal Change, 2000, 'Foreign Investment in Mining', Summary Archive under 'Mining and Mineral Resources', www.chinalegalchange.com, accessed July 2002.
- China.org, 2002, 'More Investment in Non-Oil-And-Gas-Mining Encouraged', www.china.org.cn, 14 December 2000, accessed May 2002.
- Chinese National Bureau of Statistics, 2000, *China Statistical Yearbook*, China Statistics Press, Beijing.
- , 2001, *China Statistical Yearbook*, China Statistics Press, Beijing.
- , 2002, Statistical information obtained from NBS website, www.stats.gov.cn, accessed July 2002.
- George, S., 2002, Economic Analytical Unit interview with Chief Representative, BP Fuels, Guangzhou, March.

- Humphreys, D., 2002, 'China Mining and Metals: The Waking Giant', Paper presented by Rio Tinto Chief Economist to Canadian Institute of Mining and Metallurgy's Annual General Meeting, 30 April 2002, www.riotinto.com, accessed July 2002.
- International Energy Agency, 1999, 'Coal in the Energy Supply of China', www.iea.org, accessed July 2002.
- , 2000, *World Energy Outlook 2000*, Paris.
- Lee, M.K., 2001, 'Exploration and Mining in China', Presentation given to Sydney Mineral Exploration Discussion Group, January 2001, www.smedg.org.au, accessed July 2002.
- MIM Holdings, 2002, Information supplied to Economic Analytical Unit, Brisbane, June.
- Ministry of Land and Resources, 2002, 'Mineral Resources Management', www.mlr.gov.cn, accessed July 2002.
- Perkins Coie, 2002, 'New Rules Mean New Prospects in China for International Mining Companies', www.perkinscoie.com, accessed May 2002.
- Schneider, K. and T. Sheales, 2002, Economic Analytical Unit interview with Chief Commodity Analysts, Australian Bureau of Agricultural and Resource Economics, Canberra, May.
- Sino Gold Limited, 2002, Information supplied to Economic Analytical Unit, Sydney, October.
- Sinopec, 2001, 'Annual Report 2001', www.sinopec.com.cn, accessed June 2002.
- State Council of the People's Republic of China, 1998, 'Compilation of Laws and Regulations Concerning Foreign Investment in China', Second Edition, Compiled by the Information Office, Beijing.
- State Development Planning Commission, 2002, 'Foreign Investment Catalogue', www.sdpc.gov.cn, accessed July 2002.
- Surpac, 2002, Information supplied to Economic Analytical Unit, Perth, June.
- TradeData International, 2002, Consultancy supplied to Economic Analytical Unit, Melbourne, June.
- US Department of Commerce, 2002, 'Country Commercial Guide Financial Year 2002 – China', www.usatrade.gov, accessed June 2002.
- US Department of Energy, 2001, 'Country Analysis Brief – China: Environmental Issues', April 2001, www.eia.doe.gov, accessed July 2002.
- , 2002, 'International Energy Outlook', March 2002, www.eia.doe.gov, accessed July 2002.
- US Geological Service, 2000, 'The Mineral Industry of China', www.minerals.usgs.gov, accessed July 2002.
- , 2002, 'Mineral Commodity Summaries – Iron ore', January 2002, www.minerals.usgs.gov, accessed July 2002.

WMC Limited, 2002, Information supplied to Economic Analytical Unit, Beijing, June.

World Bank, 2001, *China, Air, Land, Water, Environmental Priorities for a New Millennium*, www.worldbank.org, accessed July 2002.

World Trade Atlas, 2002, *Global Trade Information Service* database, accessed August 2002.

World Trade Organization, 2001a, , 'Most Favoured Nation Tariff – Other Products', December 2001, www.wto.org, accessed July 2002.

— , 2001b, 'Most Favoured Nation Tariff – Staging Matrix for Other Products', December 2001, www.wto.org, accessed July 2002.

— , 2001c, 'Annex 2A1 – Products Subject to State Trading (Import)', December 2001, www.wto.org, accessed July 2002.

— , 2001d, *Working Party Report on the Accession of the People's Republic of China*, December 2001, www.wto.org, accessed January 2002.

APPENDIX

Table 5A.1

Summary of China's Major WTO Mineral and Energy Commitments

Measure	Commitment	Time frame for implementation
Trade in mineral and energy goods		
Import tariffs	Authorities will progressively cut average mineral and energy tariffs to under 5 per cent. (See Appendix Table 5A.2.)	By 2010; most cuts to occur by 2006.
Non-tariff barriers	Authorities will issue progressively increasing crude and processed oils import quotas to non state traders. (For details, see Appendix Table 5A.3.)	Immediate
	Trading rights will be opened to all businesses	Progressively by 2005
	All export subsidies will be eliminated	Immediate
	Anti-dumping, subsidies, countervailing measures and technical barriers to trade will be brought in line with WTO requirements	Immediate
	Most price controls and all dual trade pricing removed	Immediate
	Uniform administration of trade-related laws to be enforced across China	Immediate
Foreign investment regulations		
FDI caps	No specific WTO-related changes made to mineral and energy investment restrictions. (Nevertheless, the Chinese authorities further opened some sectors to foreign investment in early 2002; for more details, see Appendix Table 5A.7.)	—
Trade-related investment measures	Authorities will not be allowed to prohibit FDI because it might affect Chinese suppliers	Immediate
	All requirements for foreign exchange balancing, trade balancing, export performance, local content, technology transfer and research eliminated	Immediate

Sources: World Trade Organization, 2001a, 2001b, 2001d; Economic Analytical Unit calculations.

Table 5A.2

Tariffs on Mineral and Energy Imports Low and Declining**Import Tariffs for Major Mineral and Energy Commodities, Per cent, 2002-2004**

Commodity	Rate prior to WTO entry	1 January 2002	1 January 2003	1 January 2004
Iron ores	0	0	0	0
Base metal and cobalt, tin, chromium and tungsten ores and concentrates	0	0	0	0
Precious metal ores and concentrates	0	0	0	0
Coking coal	3	3	3	3
Steaming coal	6	6	6	6
Liquefied natural gas	6	6	6	6
Alumina	18	12	10	8
Non-monetary gold	8	2	0	0
Steel, semi finished	3	2	2	2
Steel, flat rolled	6-10	3-10	3-10	3-10
Simply transformed base metals and products	2-15	1-15	1-15	1-15

Sources: World Trade Organization, 2001a, 2001b.

Table 5A.3

Non State Import Trading Quotas for Oil Products Scheduled to Rise**Level of China's Petroleum Oils Quota Allocated to Non State Traders^a, Million tonnes, and Bound import tariff rate, Per cent, 2002–2004**

Commodity	2002	2003	2004
Crude oil – quota^b	8.3Mt	9.5Mt	11.0Mt
<i>Bound tariff rate</i>	<i>0 per cent</i>	<i>0 per cent</i>	<i>0 per cent</i>
Processed oil – quota^{c,d}	4.6Mt	5.3Mt	6.1Mt
<i>Bound tariff rate^e</i>	<i>5-9 per cent</i>	<i>5-9 per cent</i>	<i>5-9 per cent</i>

Notes: a China agreed to allocate import quotas in crude and processed oils to non state traders, starting from WTO accession, and increasing these by 15 per cent annually. This increase in quota will last for a 10 year period, although the processed oil quota growth rate will be reviewed in 2004.

b This quota amount is equivalent to just under 12 per cent of 2001 crude oil imports. Crude oil imports grew by 21.7 per cent per annum between 1996 and 2001 (World Trade Atlas, 2002).

c Processed oil includes gasoline, kerosene, diesel, lubricating oils and greases and paraffin. This category excludes LPG, which is subject to a separate import quota.

d This quota amount is equivalent to just under 19 per cent of 2001 processed oil imports. Processed oil imports grew by 6.3 per cent per annum between 1996 and 2001 (World Trade Atlas, 2002).

e Tariff rate varies according to type of processed oil. For details, see World Trade Organization, 2001c.

Sources: World Trade Organization, 2001a, 2001b, 2001c; Economic Analytical Unit calculations.

Table 5A.4

WTO to Expand Minerals and Energy Output and Imports

Forecast Mineral and Energy Value Added, Production, Imports and Exports, Growth Rate and Level, Per cent and US\$ billion, 2000-2010

	Average annual value added growth rates without WTO entry 2000-2010	Change in annual growth rates due to WTO entry 2000-2010	Absolute level of value added without WTO entry in 2010	Change in absolute level of value added due to WTO entry in 2010
	per cent	percentage points	US\$ billion, 2000 prices	US\$ billion, 2000 prices
Mineral and energy output	7.7	1.3	121.9	16.0
Coal	6.6	1.1	13.9	1.5
Natural gas	3.8	0.6	0.4	0.0
Ferrous metal ores	5.7	0.6	1.9	0.1
Non-ferrous metal ores	6.2	0.8	3.5	0.3
Other mining	5.7	0.7	32.2	2.1
Iron and steel	9.3	1.8	57.1	10.0
Non-ferrous metal products	8.4	1.7	13.0	2.1
Mineral and energy imports	11.5	2.0	134.2	25.5
Coal	21.4	6.5	0.5	0.3
Natural gas	20.6	2.9	0.6	0.2
Ferrous metal ores	14.0	2.9	4.8	1.4
Non-ferrous metal ores	20.1	5.7	2.1	1.2
Other mining	11.1	2.3	91.8	20.5
Iron and steel	11.6	0.2	20.8	0.4
Non-ferrous metal products	11.9	1.2	13.7	1.5

Note: Refer to notes to Table 5.1 for explanation of forecasts presented.

Sources: Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

Immediate Resource Export Opportunities

Economic Analytical Unit commissioned analysis of Australian and Chinese trade data reveals many significant and immediate Australian resource export opportunities in China. Using commodity specific Australian mineral and energy export prices, Chinese import prices for these commodities, Australian export and Chinese import growth, the size of Chinese markets and Australian export capacity, this analysis identified the potential growth areas for Australian exports of mineral and energy commodities in the Chinese market. A commodity is considered a strong export opportunity if it meets three or more of the four criteria.

This analysis highlights some immediate new opportunities for Australian resource exporters; these opportunities are based on a combination of price and trade growth differentials and established Australian market presence. The analysis also provides an estimate of likely market potential for Australian exporters over a five year horizon. The most prospective commodities are included in Table 5A.5.

Table 5A.5

Immediate Mineral and Energy Export Opportunities for Australia TradeData International Analysis of Australian Export Potential in China

Commodity	Ratio of Chinese imports to Australian exports ^a	Australian market share of Chinese imports ^b Per cent	Chinese relative import growth ^c Per cent	Price gap ^d Per cent	Potential ^e (US\$ million)
Meeting all four criteria					
Petroleum oils and oil obtained from bituminous minerals, crude	3.5	1	8	-5	583.6
Unwrought refined copper cathodes	2.1	2	35	0	67.6
Liquefied butane	2.5	8	44	15	29.2
Liquefied propane	2.1	7	5	10	18.5
Tubes and pipes of refined copper	4.4	2	12	35	9.2
Carbon	4.1	4	30	21	3.9
Flat rolled (zinc alloy coated or plated) iron or steel products over 600mm in width	1.5	10	61	40	2.9
Thin aluminium foil	7.7	4	4	22	2.7

Commodity	Ratio of Chinese imports to Australian exports ^a	Australian market share of Chinese imports ^b Per cent	Chinese relative import growth ^c Per cent	Price gap ^d Per cent	Potential ^e (US\$ million)
Napthalene from the distillation of high temperature coal tar	1.7	5	90	41	1.1
Threaded articles of iron or steel	4.0	1	11	48	1.1
Zinc oxide, zinc peroxide	5.7	4	12	3	1.0
Non-circular section welded tubes and pipes of iron and steel	2.3	1	37	8	0.9
Unfitted aluminium casks	4.1	5	27	318	0.6
Tubes and pipes of brass	9.0	1	19	43	0.6
Meeting three of four criteria					
Agglomerated iron ores and concentrates	14.5	1	31	38	22.0
Manganese ores and concentrates	1.8	35	12	0	8.8
Zirconium ores and concentrates	2.1	58	57	33	4.5
Iron oxides and hydroxides	64.9	2	28	252	3.2
Bars, rods and profiles of brass	2.8	3	13	-8	3.1
Kaolin and kaolin clays	17.5	1	63	44	2.2
Nickel oxides and hydroxides	457.8	5	33	7	0.9

Notes: a This column gives the ratio of Chinese imports of the commodity to total Australian exports of the commodity, over the period 1998-2001.

b This column measures the share Australian exports hold of Chinese imports of the commodity, over the period 1998-2001.

c This column gives the difference between Chinese import growth for the commodity and Australian export growth for the commodity, over period 1998-2001.

d This column shows how much higher the average Chinese import price is compared to the average Australian export price of the commodity, over the period 1998-2001.

e This column shows potential Australian exports to China of this commodity in year five if Australia was to gain an extra 5 per cent market share over the next five years.

Source: TradeData International, 2002.

Table 5 A.6

China's Mineral and Energy Reserves Substantial

Proven reserves, 1990, 1995 and 1998, and Per cent of reserves in Central and Western Regions

Mineral	1990	1995	1998	Per cent of reserves in central and western regions
Coal (billions of tonnes)	954	1008	1007	94.8
Oil (billions of tonnes)	2.2	2.3	2.4	63.5
Gas (billions of cubic metres)	—	644	962	72.2
Iron ores (billions of tonnes)	50	46	46	50.1
Manganese ores (millions of tonnes)	582	553	537	90.7
Aluminosilicate ores (billions of tonnes)	2.0	2.3	2.3	—
Copper metal (millions of tonnes)	61.5	62.7	63.1	91.8
Lead metal (millions of tonnes)	33.4	35.3	35.1	76.4
Zinc metal (millions of tonnes)	84.0	92.6	92.4	80.4
Gold metal (tonnes)	3137	4265	4157	63.3

Source: Ministry of Land and Resources, 2002.

Table 5 A.7

China's Restrictions on Foreign Mineral and Energy Investment Lessening

Latest Official Chinese Guidelines to Foreign Mineral and Energy Investment, Selected Sectors, April 2002^a

Sector of mining	Nature of limitation in place, if any
Encouraged sectors^b	
Risk exploring and developing of petroleum and natural gas	Joint contractual ventures only
Developing and applying new technologies capable of improving the recovery rate of crude oils	Joint contractual ventures only
Developing and applying new technologies for oil exploration and development	Joint contractual ventures only
Exploring and developing coal and accompanying resources, and coal bed gas	None
Mining and separating minerals in gold mines with low grade ore which are hard to separate	Limited to joint equity or contractual venture; wholly foreign owned enterprises allowed in the western part of China
Exploring, mining and separating iron and manganese ores	None

Sector of mining	Nature of limitation in place, if any
Exploring and mining copper, lead, zinc and aluminium	Limited to joint equity or contractual venture; wholly foreign owned enterprises allowed in the western part of China
Deep processing of needle coke or coal tar	None
Producing tamped coke or dry coke, or pitch for key roads	None
Producing ferrous metals including wide and thick planks, galvanised aluminium-zinc alloy planks and coating planks, direct reduction iron and molten reduction iron, and processing of waste steel	None
Producing alumina exceeding 300 000 tons annually	None
Smelting of low grade hard to separate gold	Limited to joint equity or contractual venture; wholly foreign owned enterprises allowed in the western part of China
Manufacturing of hard alloys, tin compounds and antimony compounds	None
Manufacturing of non-ferrous composites and new type alloys	None
Rare earth applications	None
Restricted sectors^c	
Exploring and mining tungsten, tin, antimony, molybdenum, barite and fluorite ores	Joint equity or contractual ventures only
Exploring and mining precious metals (gold, silver and platinum family metals)	Unspecified
Exploring and mining precious non-metal ores, such as diamonds	Unspecified
Exploring and mining special rare coals	Chinese side must take majority or leading share
Mining of camsellite, colbranite and celestine	Unspecified
Constructing and managing of oil processing plants	Unspecified
Rare earth smelting	Joint equity or contractual ventures only
Prohibited sectors^d	
Exploring, separating and mining radioactive materials and rare earth metals	

Notes: a These guidelines were released in early 2002. As a general rule, all sectors not specifically identified in this catalogue of investment are permitted. Permitted sectors are those where foreign investment less than US\$30m requires only local government approval, investment between US\$30 and US\$100m only requires MOFTEC approval and investment over US\$100m requires State Council approval.

b Encouraged sectors are those where foreign investment less than US\$30m requires only local government approval and investment over US\$30m requires provincial government approval.

c Restricted sectors are those where foreign investment less than US\$30m requires only provincial government approval.

d Prohibited sectors are those where foreign investment is not approved.

Sources: State Development Planning Commission, 2002; American Chamber of Commerce, 2002.

OPPORTUNITIES IN MANUFACTURING AND INFRASTRUCTURE

KEY POINTS

- Over the medium to long term, opportunities for Australian manufactured exports should expand from a modest base as China's WTO entry and other reforms reduce market barriers, boost local incomes and increase transparency and certainty in the trading and business environment.
- Manufacturing foreign direct investment, FDI, opportunities also should grow as domestic demand expands, entry barriers fall and the business environment improves.
- However, to capture maximum benefits from WTO entry, authorities recognise they need to increase labour market flexibility, improve economic infrastructure and increase private manufacturers' access to finance.
- In recent years, the Chinese Government spent heavily on infrastructure, including in the western provinces; authorities also corporatised some public utilities and opened some infrastructure sectors to private and foreign investment.
- Over the next five years, China plans to continue expanding and upgrading key infrastructure facilities and is seeking significant private foreign capital, equipment and services expertise. Improving infrastructure quality, coverage and regulatory governance will remain a high priority.
- Australia's experience in privatising public infrastructure and providing new private infrastructure should generate opportunities for Australian infrastructure and related goods and service companies in China.

MANUFACTURING

WTO entry will further assist China's growth and successful specialisation in labour intensive manufacturing, in which it enjoys strong cost advantages, and also should boost productivity in less efficient capital intensive manufacturing by increasing competitive pressures. In turn, this will further increase Chinese manufacturing's integration with the world economy. China's fast growing manufacturing sector should deliver Australian companies new export and investment opportunities, particularly in providing manufactured inputs to Chinese businesses.

OVERVIEW OF CHINESE MANUFACTURING

Manufacturing is China's largest sector; in 2000, manufacturing value added totalled US\$373 billion, equivalent to 34.5 per cent of gross domestic product (World Bank, 2002a).¹ Manufacturing industry employs approximately 200 million workers, or 29 per cent of the workforce, the second highest employer after agriculture (CEIC, 2002).²

Although slower than the extraordinary growth in the early 1990s, China's industrial sector expansion still is more rapid than that of most major economies, averaging 10 per cent per year between 1995 and 2001 (Figure 6.1). Among the different ownership forms, individually-owned and other forms of non-state industrial businesses, including foreign funded enterprises, are growing the fastest, all averaging over 15 per cent real annual growth in the late 1990s. Over the same period, state-owned and controlled industrial enterprise real gross output grew less than 3 per cent per year on average (Chinese National Bureau of Statistics, 2000).

Structure of Chinese Manufacturing

By early 2002, light industry accounted for 40 per cent of industrial value added and heavy industry the remainder; between the mid 1990s and early 2000s these shares changed little (CEIC, 2002).³ Reflecting the continuing strong growth of collective and private manufacturing, the share of state owned enterprises in total industrial sales continues to fall, down to around 21 per cent of total in 2001, compared to well over 40 per cent in the mid 1990s (CEIC, 2002).

China produces large amounts of labour intensive light manufactures including clothes, footwear, toys and leather goods. However, in the late 1990s and early 2000s, these sectors' output growth declined, while that of higher value household electrical goods and information and communications technology, ICT, products, increased dramatically (Figure 6.2). However, as China mainly undertakes the final, labour intensive assembly stages of ICT production, this shift is not as dramatic as it first appears; netting out imported inputs from the output of ICT products significantly reduces growth rates.⁴

¹ Industrial value-added, which also includes construction and some infrastructure sectors, was worth US\$549 billion in 2000 and equivalent to 51 per cent of GDP (World Bank, 2002a).

² About 80 million people work in formal manufacturing and another 130 million in town and village enterprises that typically produce light manufactured goods (CEIC, 2002).

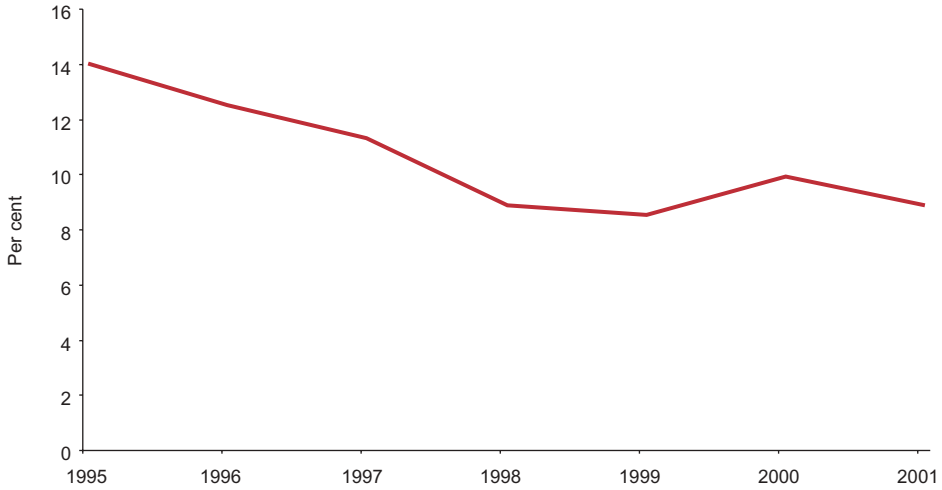
³ The 'heavy industry' output figures include food processing and mineral and energy extraction and processing activities. (See Chapter 4 – *Agriculture and Agribusiness* and Chapter 5 – *Minerals and Energy*.) If these are excluded, light and heavy industry each account for about half of total industrial value added (Chinese National Bureau of Statistics, 2000, 2001).

⁴ This phenomenon is analysed in more detail in a forthcoming Economic Analytical Unit report on the restructuring of East Asia's production chain (Economic Analytical Unit, 2002, forthcoming).

Figure 6.1

Industrial Output Growth Still Strong

Real Industrial Output Growth, Per cent, Annual, 1995-2001

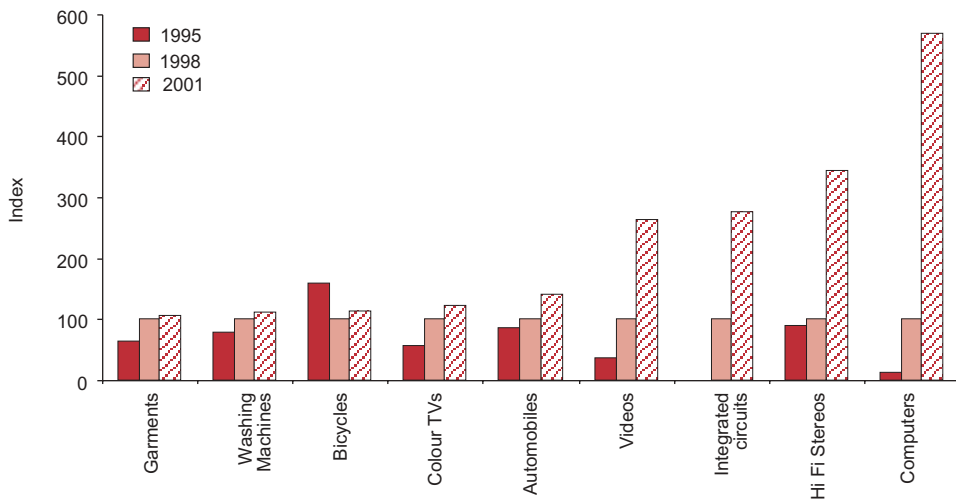


Sources: World Bank, 2002a; CEIC, 2002.

Figure 6.2

China Moving Up the Manufacturing Value Chain

Output of Selected Manufactured Goods, Index, 1998=100, 1995, 1998 and 2001



Source: CEIC, 2002.

Manufacturing Internationally Integrated

One of China's major achievements in the past twenty years is the successful international integration of its light manufacturing industry.

Foreign trade

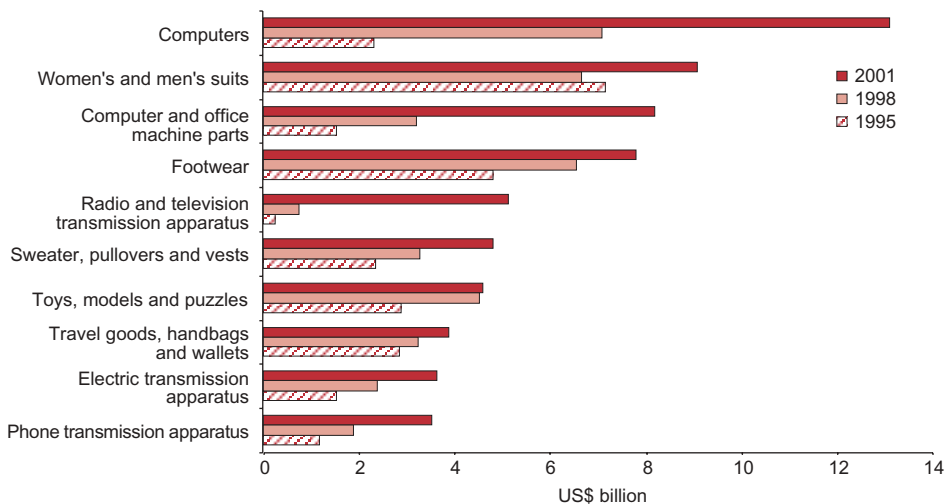
Chinese manufacturers actively trade in the global market, with manufactured exports representing around 90 per cent of total Chinese exports (World Trade Atlas, 2002). In 2000, China was the world's sixth largest exporter of manufactured products, accounting for just under 5 per cent of global trade in manufactures; this compares to a 1.9 per cent share in 1990 (World Trade Organization, 2001a).

From the mid 1990s, rapid production and assembly operation expansion boosted China's exports of higher value manufactures, particularly finished electrical, telecommunications and computer equipment. China also remains a major exporter of clothing, footwear, toys and leather goods (Figure 6.3). Its major manufactured export markets are the United States, Japan, the Republic of Korea and the European Union (CEIC, 2002; World Trade Atlas, 2002).

Figure 6.3

Exports of Higher Value Manufactures Increasing

China's Top Ten Manufactured Exports, US\$ billion, 1995, 1998 and 2001

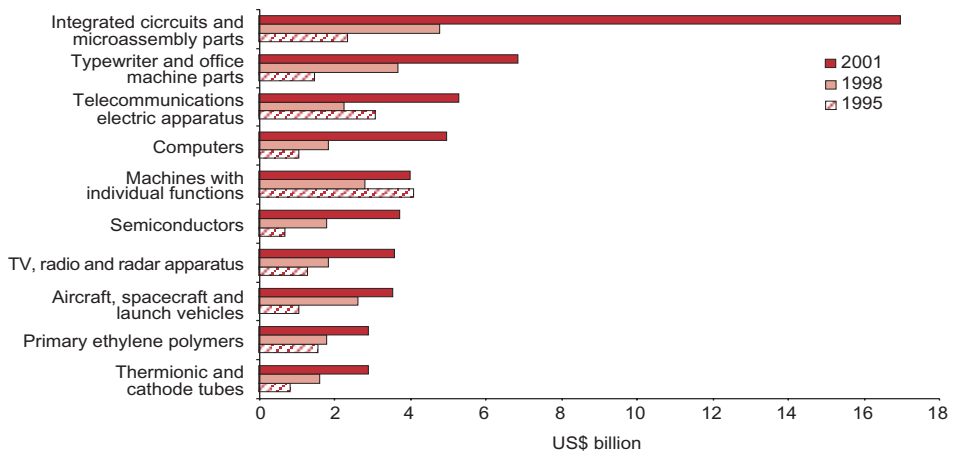


Source: World Trade Atlas, 2002.

Manufactures also account for over 80 per cent of China’s merchandise imports, with many of these imports either capital equipment or intermediate inputs or semi-finished goods, including integrated circuits and semiconductors, parts for office machines and other semi-finished parts (World Trade Atlas, 2002). These components supply China’s burgeoning assembly and re-export industries (Figure 6.4). China’s major manufactured imports sources are Japan, the Republic of Korea, Taiwan, North America, the European Union and ASEAN (World Trade Atlas, 2002).

Figure 6.4

Manufactured Imports Comprise Mainly Industrial Components
China’s Top Ten Manufactured Imports, US\$ billion, 1995, 1998 and 2001



Source: World Trade Atlas, 2002.

Foreign investment

Manufacturing continues to receive the lion’s share of Chinese FDI. Between 1997 and 2001, manufacturing industries attracted 60 per cent of China’s US\$220 billion FDI inflows (CEIC, 2002). Ample supplies of labour, generally adequate infrastructure and increasingly liberal FDI policies continue to attract increasing investor interest from foreign manufacturers. A large domestic market and remaining import protection on manufactures like automobiles also attract foreign investment aimed at the domestic market. Within manufacturing, the direction of FDI has been shifting; in the mid and late 1990s, textiles and apparel, chemicals and machinery received most foreign investment, but between 1999 and 2001, electronics and communication equipment FDI doubled, strongly contributing to surging computer and integrated circuit production (CEIC, 2002).

Challenges Being Addressed

However, many challenges still undermine Chinese manufacturers' competitiveness. China's rapidly expanding economy strains its transport and port infrastructure capacity and quality, reducing manufacturing sector productivity. While now more relaxed, restrictions on internal labour movement and problems in managing state owned enterprise and joint venture work forces can reduce China's still significant labour cost advantage. A major, though declining, state owned enterprise presence in most heavy and a few light manufacturing sectors, including textiles and household electrical goods, inhibits competition and efficiency and creates overcapacity in many of these sectors.⁵

Authorities also can intervene in private manufacturing operations, limiting their flexibility and imposing ad hoc taxes. Because of weak bankruptcy laws, securing payment for goods and services can be difficult and property rights are not fully guaranteed. Many small private firms cannot easily access bank or sharemarket finance, constraining their growth.⁶ Also, many major trading partners restrict imports of some Chinese manufactures, notably textiles and apparel into the United States and parts of the European Union.⁷

However, the Government is addressing many domestic constraints on manufacturing. Since 1998, it has invested heavily in transport links, road, rail, airports, ports and electricity. Authorities continue to loosen labour movement restrictions, privatise state owned enterprises, SOEs, and intervene less in non state enterprises; WTO entry should reinforce these reforms. The Chinese Constitution now recognises the important role of the private sector. (See Chapter 2 – *Economic Overview*.) Authorities also continue to address banking system biases; recent data indicates short term bank credit to the private sector rose an extraordinary 50 per cent per year between 1996 and 2001, compared to total short term credit growth of only 6.6 per cent over the same period (CEIC, 2002).⁸ Some financial institutions also are financing smaller enterprises in innovative ways.⁹ Moreover, WTO accession boosts China's export access; over the next 10 to 15 years, trading partners have committed to ease global apparel and textile export quotas and reduce or abolish other restrictions. Thus, ongoing economic reforms and meeting its WTO accession commitments should help China address some of the challenges manufacturers face.

⁵ Much of China's capital intensive heavy industry is less internationally competitive than its light industry, reflecting heavy industry's large state presence and much smaller exposure to international trade and investment. However, strengthening FDI in more capital intensive sectors, such as semiconductors, chemicals, automobiles and metals processing, gradually should improve heavy industry productivity, boosting longer term growth potential.

⁶ Many of these business challenges are outlined in Chapter 1 – *Doing Business*.

⁷ China also faces ongoing restrictions on exports of a variety of light manufactured goods to countries including Argentina, Hungary, Mexico, Poland, the Slovak Republic and Turkey (World Trade Organization, 2001b). Australia does not place quotas or other quantitative restrictions on Chinese exports.

⁸ However, this is from a very low base; in 2001, credit to private and individual businesses reached only 1 per cent of short term bank loans, up from 0.2 per cent in 1996 (CEIC, 2002).

⁹ For example, banks can use more innovative methods to determine creditworthiness and some banks use bills of lading, stocks, group joint assets and even debts payable as collateral for loans. This allows banks to expand their loan book significantly to the private sector. In some institutions, up to 80 per cent of recent loans to private small and medium enterprises are based on these new forms of collateral (Wang, 2002).

WTO ENTRY IMPACTS ON MANUFACTURING

In entering the WTO, China agreed to gradually cut import tariffs on a wide variety of manufactured products and boost trade and regulatory transparency; these measures should assist manufacturing exporters and investors enter and compete in the Chinese market (Table 6.1, Appendix Table 6A.1, Appendix Table 6A.2).

Table 6.1

Summary of China's Major WTO Manufacturing Commitments

Measure	Commitment	Time frame for implementation
Trade in manufactured goods		
Import tariffs	Progressively cut average manufactured goods tariffs to 9.5 per cent. ^a (See Appendix Table 6A.1 for details.)	By 2010; most cuts to occur by 2006.
Non-tariff barriers	A wide variety of import quotas and licenses removed. (See Appendix Table 6A.2 for details.)	Progressively by 2006
	Trading rights opened to all businesses	Progressively by 2005
	All export subsidies eliminated	Immediate
	Anti-dumping, export subsidies, countervailing measures and technical barriers to trade to be brought in line with WTO requirements.	Immediate
	Most price controls and all dual trade pricing removed	Immediate
	Uniform administration of trade-related laws to be enforced across China	Immediate
Foreign investment regulations		
FDI caps	Further reductions in manufacturing FDI restrictions. (See Table 6.2.)	Immediate
Trade-related investment measures	Authorities cannot prohibit FDI because it will affect Chinese suppliers	Immediate
	All requirements for foreign exchange balancing, trade balancing, export performance, local content, technology transfer and research eliminated	Immediate

Note: a These import tariffs exclude mineral and energy, or resource, products.

Sources: World Trade Organization, 2001c, 2001d, 2001f; Economic Analytical Unit calculations.

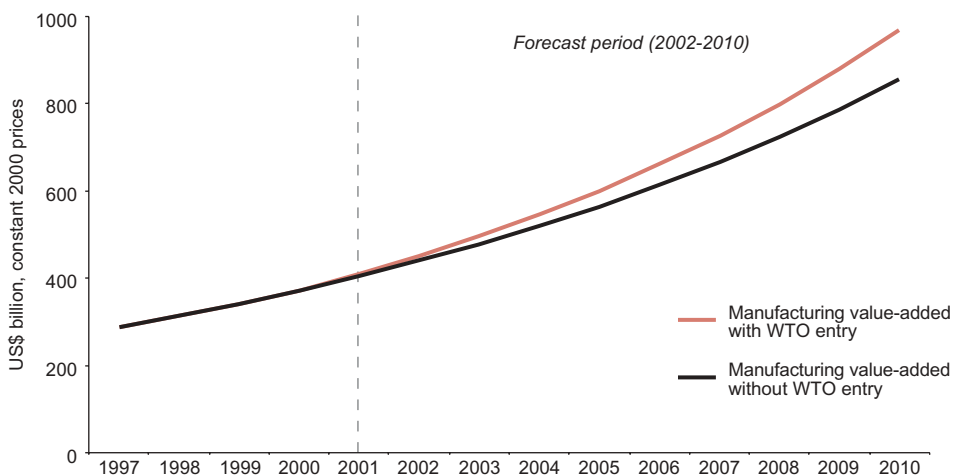
With a few exceptions, the Government already allowed 100 per cent foreign ownership in Chinese manufacturing sectors well before WTO entry, but its WTO package committed it to important trade-related investment measures, reinforcing foreign investment access.¹⁰ First, Chinese authorities committed to remove foreign exchange balancing, export performance and trade balancing conditions, allowing foreign manufacturing investors to supply the Chinese domestic market without conditions.¹¹ Second, authorities agreed to remove local content requirements so investors now can choose the most competitive supplier of inputs. Finally, authorities no longer are allowed to influence the choice of foreign investors' business partners and foreign firms no longer must transfer technology to the Chinese partner. Foreign businesses regularly identify these issues as substantial barriers to new or expanded investment, particularly in industries with a large potential domestic market or significant intellectual property (American Chamber of Commerce, 2001; US Trade Representative, 2002).

Overall, increased competition from imports, rising private and foreign capital inflows and increased access to global markets should improve domestic manufacturers' productivity and output growth. Over the medium term, Economic Analytical Unit commissioned modelling forecasts the WTO package could boost manufacturing sector growth by as much as 1.4 percentage points per year (Figure 6.5, Appendix Table 6A.3).

Figure 6.5

WTO Entry To Boost Manufacturing Growth

Actual and Forecast Manufacturing Value Added, US\$ billion, Constant 2000 prices, 1997-2010



Sources: World Bank, 2002a; Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

¹⁰ The most important remaining FDI restrictions are on segments of heavy industry, most notably automobiles.

¹¹ Export performance and trade and foreign exchange balancing conditions controlled foreign investors' international trade activity, limiting their ability to supply products to the domestic market.

WTO entry should boost growth in value added of motor vehicles, auto parts and other manufacturing output most, followed by textiles and clothing value added (Appendix Table 6A.3) (Centre of Policy Studies, 2002; Ianchovichina et al., 2001). Other studies show that electronics and light machinery manufacturing also should benefit from WTO entry (Zhai et al., 2001).

AUSTRALIAN BUSINESS OPPORTUNITIES IN MANUFACTURING

In the short term, most Australian manufacturing opportunities lie in supplying inputs and equipment to China's rapidly expanding businesses; WTO entry is unlikely to increase significantly Australian manufactured consumer exports to China, since consumer demand for higher value manufactures is constrained by relatively low incomes and imports, particularly from North East Asia, compete strongly. However, in the medium to long term, as middle and upper class consumers' per capita incomes continue growing and businesses seek to increase efficiency, consumer and business demand for specialised manufactured goods will increase.

HARBOUR AND MARINE ENGINEERING

Melbourne-based Harbour and Marine Engineering is a leading supplier of vessel mooring systems and related engineering services to ports, harbours and the offshore oil and gas industry throughout the world. Harbour and Marine's project experience ranges across coal, iron ore, bauxite and other bulk materials, oil and petroleum products, liquefied natural gas and general cargo wharves.

Harbour and Marine has been exporting to China since the late 1990s. Its major customers include Baoshan Steel, Shanghai Petroleum Corporation and the Zhenhai Refinery, as well as multinationals Caltex and BP. Harbour and Marine Engineering has been selling its entire range of goods and services to these firms, from basic mechanical mooring equipment through to instrumentation for monitoring bulk cargoes and laser docking systems.

Harbour and Marine Engineering researched Chinese maritime industry structure thoroughly upon commencing business and has carefully built relationships with Chinese port design institutes over time. They have found it challenging to convince Chinese businesses to pay more for state-of-the-art technology than the more basic local product. They also emphasise the need to protect intellectual property. However, despite increasing competition from European competitors, Harbour and Marine Engineering is very optimistic about their future in China, particularly as energy demand grows and the liquefied natural gas market develops on the back of recent contracts.

Source: Harbour and Marine Engineering, 2002.

Australian Manufacturing Trade Opportunities

Australian businesses already export small amounts of higher value manufactures to China, particularly to Chinese businesses. (See Chapter 3 – *Australian-China Business*.) Analysis undertaken for the Economic Analytical Unit by Melbourne based firm TradeData International identifies some immediate new export opportunities for Australian manufacturers. (See Appendix Table 6A.4.) Also, China's expected strong growth and scheduled cuts to manufactured import tariffs will assist specialised Australian machinery and equipment exports compete in China; motor vehicles, vehicle engines and parts, optical fibre, medical and scientific equipment will benefit most from these cuts (Appendix Table 6A.1).

Australian Investment Opportunities

China's large labour pool makes it particularly attractive to foreign manufacturers of labour intensive goods, particularly export oriented firms. Australia generally is not specialised in such production, but several Australian manufacturing firms have established operations in China to supply the Chinese domestic and third markets. Typically, these ventures supply niche and higher value added manufactures, usually based on a unique or specialised technology.

CEM INTERNATIONAL

CEM International is a diversified Melbourne based firm, principally a manufacturer of cryogenic pressure vessel tankers and insulated vessels to store and transport liquefied gases. The company employs 65 people at its Coolaroo manufacturing plant, supplying 45 per cent of the Australian market for transportable liquefied gas pressure vessels.

In 1995, after researching the Chinese market and negotiating for two years, CEM International entered a 50-50 joint venture with state owned Changzhou Energy Equipment Factory in Jiangsu province. The operation manufactures static and transportable cryogenic pressure vessels and special purpose liquefied gas road tankers, mainly for the local market. The venture became profitable from the second year of operation and now is the major supplier to multinationals including Linde, Praxair, Air Liquide and BOC, as well as many Chinese gas suppliers and consumers. By 2002, the venture held approximately 15 per cent of the growing Chinese market for cryogenic pressure vessels and now is moving into the high purity gas storage sector, an important part of China's fast-growing semiconductor manufacturing industry. Due to partner financial difficulties, CEM International is now the sole owner of the Changzhou manufacturing venture.

The company learnt valuable lessons in its start up period. It undertook tough negotiations to establish the venture, had to deal with a sometimes rigid labour and bureaucratic environment and found it had to be very patient in doing business and assessing differing partner expectations. CEM International also emphasises the need for the local Australian board to strongly commit to a venture if it is to succeed in China. Despite a recent increase in the number of competitors, the company is considering expanding into export operations from its Changzhou base.

Source: CEM International, 2002.

CSR

CSR is one of the world's largest construction and building products manufacturers, employing over 16 000 people globally through a presence in Australia, the United States, Asia and New Zealand. Annual global revenues exceed \$6 billion.

CSR entered China in 1994, undertaking negotiations to establish a variety of construction and building materials manufacturing plants. Initially, CSR formed a readymix concrete and quarrying manufacturing joint venture with the Tianjin Building Material General Supply Company. By 2002, CSR owned 70 per cent of the Tianjin plant and was the major supplier of premix concrete and quarry products to the Tianjin region.

In the mid-1990s, CSR also established two insulation products factories in Guangdong province. These profitable CSR-majority owned factories supply local and joint venture businesses and also export around one-quarter of their production to south-east Asian markets. CSR also is establishing a distribution network in the region, recently opening offices in Hong Kong and the Philippines and is soon to establish an office in Shanghai. In all, CSR now employs around 900 people in China.

CSR strongly emphasises the importance of researching the market and understanding China's complex bureaucratic processes. It is critical to appreciate how partner expectations and capabilities can affect joint venture operations. The structure and operation of the local firm dominated building industry also makes it challenging to build a market presence. Despite these challenges, CSR's operations in China are increasingly successful and provide an excellent platform for expanding their presence in China's strongly growing construction industries.

Source: CSR, 2002.

AIR INTERNATIONAL

Air International, a division of the Futuris Group, is a leading Australian supplier to the world's automotive industries, specialising in heating, ventilation and air conditioning, fabrication and seat and steering systems. As well as domestic manufacturing divisions in Victoria, South Australia and New South Wales, Air International has operations spread through Europe, North America and Asia.

In China, Air International has two manufacturing operations; the first of these, in Shanghai, was established in 1995 in partnership with a municipal state owned enterprise. In the late 1990s, Air International established another manufacturing venture in Chongqing and an engineering design centre in Shanghai. In 1999, Air International also moved its Asia-Pacific head office to Shanghai. Air International's major customers in China include GM, Ford, Mazda, Mitsubishi and local producers Jinbei, Changan and Nanjing Iveco. In all, China now accounts for about 10 per cent of Air International's global revenues.

While establishing their first venture in China was challenging and time consuming, Air International learnt important lessons from this experience. Businesses deciding to joint venture should carefully research and value the financial and asset position of potential partners, ensure a strong say in human resources issues and build a company structure that requires robust ongoing commitment from the partners. Businesses also should ensure that customers are financially sound and able to pay. These challenges aside, China remains a profitable, if competitive, market for Air International, and the expected growth in Chinese consumer incomes should continue to underpin strong growth in Air International's Chinese business.

Source: Air International, 2002.

Australian firms also may find other opportunities in a variety of manufacturing sectors now more open to FDI (Table 6.2). Investing in these sectors will be assisted by the expected gradual improvement in China's challenging business environment, although Australian businesses intending to invest must research markets, potential partners and the bureaucratic and competitive environment extensively. (See Chapter 1 – *Doing Business*.)

Table 6.2

**Restrictions on Manufacturing FDI Reducing Further
Latest Official Chinese Guidelines on Foreign Manufacturing Investment,
Selected Sectors, April 2002^a**

Manufacturing sector	Nature of limitation in place, if any
Encouraged sectors^b	
Manufacturing of special textiles, printing, dyeing and processing of high grade fabrics, new leather processing technologies	None
Manufacturing of wood pulp exceeding 300 000 tons per annum and high grade paper and paperboard (excluding newsprint)	None
Manufacturing of a wide variety of chemicals, pharmaceuticals, chemical fibres, plastic products, metal works, special equipment, communications, electronic and electrical machines and equipment ^c	None
Motor vehicles, engines and parts ^d	Chinese partner must have majority ownership share
Restricted sectors^e	
Printing of publications	Chinese partner must have majority ownership share
Oil processing plants	Unspecified
Prohibited sectors^f	
Traditional Chinese medicines	No foreign investment permitted
Ivory carving, tiger bone processing, lacquer wares, enamelware, rice paper and ink bars	No foreign investment permitted

Notes: a These guidelines were released in early 2002. As a general rule, all sectors not specifically identified in this catalogue of investment are permitted. Permitted sectors are those where foreign investment less than US\$30m requires only local government approval, investment between US\$30 and US\$100m only requires MOFTEC approval and investment over US\$100m requires State Council approval.

b Encouraged sectors are those where foreign investment less than US\$30m requires only local government approval and investment over US\$30m requires provincial government approval.

c Not all products in these sectors are fully open to foreign investment.

d FDI in motor vehicles also is becoming easier in other ways. In 2003, motor vehicle producers will be able to determine freely which categories, types and models they will produce. Also, the Government progressively is lifting provincial government limits on FDI approvals; previously, provincial governments could only authorise foreign investment in motor vehicle manufacturing up to US\$30 million.

e Restricted sectors are those where foreign investment less than US\$30m requires only provincial government approval.

f Prohibited sectors are those where foreign investment is not approved.

Sources: State Development Planning Commission, 2002; American Chamber of Commerce, 2002; World Trade Organization, 2001d, 2001e.

INFRASTRUCTURE

China is investing heavily in providing transport, water, port and energy infrastructure, providing many commercial opportunities and boosting the productivity of all other sectors.¹² While significant infrastructure challenges remain, since 1998, the Government's investment is improving the volume and quality of services available. Increased investment in the late 1990s and early 2000s followed many decades of relative neglect of infrastructure, which generated serious shortages in most infrastructure sectors. The Government's latest five year plan includes further major infrastructure programs and seeks to increase private sector infrastructure provision. The Government also is reforming markets for infrastructure services and continues to loosen limitations on infrastructure FDI.

These reforms and WTO entry should draw new private and foreign capital flows into infrastructure and gradually improve the business environment, providing opportunities for Australian firms supplying infrastructure and related goods and services. While China's imports related to major projects like power stations are significant, to date Australia mainly has supplied small amounts of high value infrastructure related consultancy, engineering, design and related services.

OVERVIEW OF INFRASTRUCTURE

As the world's most populous country with a land area of 9.6 million square kilometres, China's infrastructure networks are large and growing rapidly.¹³ Its transport network includes 1.4 million kilometres of highways and 68 000 kilometres of rail track, giving China one of the largest transport networks in the world. Road and rail dominate passenger and freight transport (CEIC, 2002; World Bank, 2002b). Coastal port capacities also are large, processing around 25 to 30 million standard containers per annum; China's largest container port, Shanghai, now is one of the world's top five container ports, with annual throughput growing by 30 per cent per annum in the late 1990s (*People's Daily*, www.english.peopledaily.com.cn, 19 October 2000; World Cargo News, 2002). Despite a recent slowdown in new power plant construction, China also is the world's second largest producer of electricity, with an annual output of about 1 308 terawatt hours and an installed capacity of 294 gigawatts (World Bank, 2001; CEIC, 2002; US Department of Energy, 2002).

Growing Foreign Trade and Investment Exposure

While China is a large producer of rail and urban transit equipment and power generating equipment, it also imports increasing quantities of specialised infrastructure goods and services.¹⁴ As it expands infrastructure networks and reforms infrastructure markets, China is seeking more advanced infrastructure goods and services.

¹² The telecommunications sector is discussed in Chapter 7 – *Services*.

¹³ For a more comprehensive treatment of China's infrastructure sector, see Spear et al, 1997, and East Asia Analytical Unit, 1998. These publications describe many of the challenges China's infrastructure sectors still face. The following material updates these publications.

¹⁴ China recently also started exporting low cost rail and urban transit development solutions and equipment; Australia purchased some rail cars from China in 2001 (Canadian Department of Foreign Affairs and International Trade, 2001b).

FDI IN CHINESE INFRASTRUCTURE PRIOR TO WTO ENTRY

Infrastructure FDI is small but growing; in 2000 and 2001, inflows into power, gas, water, transport, storage, post and communications infrastructure averaged just over US\$3 billion annually. Authorities restrict road FDI to toll roads and bridges but poor investment returns and difficulties securing bank funding reduced inflows in recent years. Hong Kong and Singapore businesses have invested substantially in developing Chinese roads, although the majority of overseas funds continue to come from concessional international financial institution loans.

In 1998, China lifted restrictions on foreign investment in railway infrastructure and Chinese rail authorities formed several joint ventures, mainly with East Asian partners. In the mid and late 1990s, partly to meet high local content requirements for local rail purchases major international firms including Adtranz and Alstom commenced manufacturing rail rolling stock in China.

Led by Hong Kong investors, including Hutchison Whampoa, and European, Singaporean, Taiwanese and United States companies, FDI provided up to 60 per cent of new investment in Chinese ports between 1996 and 2000.

Since the mid 1990s, China promoted foreign participation in about 100 joint venture power sector projects. However, ownership limitations and policy uncertainty constrain FDI inflows to this sector, so multilateral institutions play by far the largest role in funding these power investments.

Sources: CEIC, 2002; Canadian Department of Foreign Affairs and International Trade, 2001a, 2001b, 2001d.

Infrastructure Investment and Reform Priorities

Despite the high levels of investment in recent years, rapid economic growth is straining infrastructure capacity and quality. Some infrastructure networks, particularly in power generation, also degrade the environment. While the Government is responding by reforming and restructuring infrastructure sectors, significant challenges remain.

Roads and bridges

China's road networks are growing quickly, but improving quality remains a challenge. Between 1996 and 2001, China invested over US\$130 billion in highway construction; China now has almost 190 000 kilometres of higher quality highways, double the length in 1995, and 19 000 kilometres of expressways, up from only 3 000 kilometres in 1995 (China.org.cn, 2001a, 2001b; *People's Daily*, *www.english.peopledaily.com.cn*, 25 December 2001, 14 March 2002). The expanded highway system now connects about 98 per cent of China's towns and over 90 per cent of administrative villages.¹⁵

¹⁵ Since 1999, the Government increased priority for constructing roads in the western regions of China, where coverage is much lower, with very few high quality highways or expressways. Western region expenditures expanded by over 20 per cent in 2001, the fastest pace for many years (China.org.cn, 2001a, 2002a).

However, only 20 per cent of China's 1.4 million kilometres of highway are paved, limiting road quality (Central Intelligence Agency, 2002). Hence, all-weather roads still cover only a low proportion of the country and strongly growing traffic and freight volumes outstrip recent highway length increases (CEIC, 2002; China.org.cn, 2002b).¹⁶ Moreover, uncertain investment and concession regulations limit private investment in roads and bridges.

Rail

China's large rail network faces many challenges which the authorities are gradually addressing. Due to sub-commercial rail tariffs, China's railways generate negligible profits or losses and often are overstretched. Freight and passenger traffic densities are far higher than on other major rail systems including India and the United States, with more than 50 per cent of potential rail freight demand unmet (World Bank, 2000; Canadian Department of Foreign Affairs and International Trade, 2001b). Despite recently corporatising, central rail ministry authorities still set most freight charges, limiting operating flexibility (Briginshaw, 2000). Overstaffing and poor efficiency continue to undermine financial performance. Train speeds are low on most lines and loading and unloading delays considerable.

However, rail authorities slowly are improving track quality and restructuring the sector. To improve rail service efficiency authorities are electrifying tracks, constructing double tracks, re-railing, upgrading rail transport facilities from China's coal producing regions and improving services and facilities in south-west China (Canadian Department of Foreign Affairs and International Trade, 2001b). By upgrading tracks and phasing out old engines, train travel times between major centres are declining dramatically (Briginshaw, 2000; China.org.cn, 2001b; Canadian Department of Foreign Affairs and International Trade, 2001b).

Rail management also is improving. In the late 1990s, central rail authorities devolved some decision-making power and financial responsibility to regional managers. Authorities also removed railway regulatory functions from rail enterprises, closed unprofitable operations, reduced staff numbers and forced all operations to better respond to consumer needs (Briginshaw, 2000).¹⁷ By 1999, these reforms returned the rail sector to profitability, although the return on investment remains very low.

Coastal ports

Despite rapid expansion of new ports in the last decade, including numerous joint ventures, most ports' freight demand already exceeds capacity; WTO entry and on-going growth will further boost trade volumes, exacerbating this situation (CEIC, 2002; *Cargonews China*, www.cargonewschina.com, 1 July 2001). (See Chapter 1 – *Doing Business* and Chapter 2 – *Economic Overview*.) Investing in the port sector has proven difficult for many major foreign investors, particularly in managing relations with local government joint venture partners.

However, the Government is improving port access and increasing container handling capacities, corporatising several port operations and separating government regulatory and commercial functions.

¹⁶ This comes on top of already stretched capacity; in 1999, traffic on more than half of China's roads already exceeded their design capacity (Canadian Department of Foreign Affairs and International Trade, 2001a).

¹⁷ To date, most efforts focused on freight traffic, which lost market share to road and air due to poor efficiency.

Many major ports now are structured as public shareholding corporations and can freely construct and plan ports, manage material supply and determine employment and remuneration matters (British Embassy Beijing, 2001). Some ports also are considering listing on Chinese stock exchanges and authorities may fully privatise ports to raise funds (*Cargonews China*, www.cargonewschina.com, 1 January 2001). However, the Ministry of Communications still sets and administers most port charges, which can undermine the viability of joint venture and private operations.

Airports

Over the past decade, China's airport and air transport industries grew strongly, with freight traffic increasing fivefold and passenger traffic quadrupling (CEIC, 2002). The Government also focused on improving the quality of air travel and China's poor air safety record (Canadian Department of Foreign Affairs and International Trade, 2001e). However, this extraordinary growth and slow gains in safety strain the sector, forcing further restructuring. In particular, the Government is concentrating on rationalising the overcrowded market, largely through forming three major air transport groups out of the current dozens of airlines. Air China, out of Beijing, China Eastern, from Shanghai, and China Southern, from Guangzhou, will emerge as the key players in the Chinese aviation market once restructuring is complete.

Power sector

Through the mid and late 1990s, strong, even excessive, investment in the power sector met the rapid increase in demand for electricity, but many factors still hamper efficient power supply and periodic power shortages occur in fast growing regions (Wu, 2001). China does not have a unified power grid and transmission and distribution links between many regions are weak, limiting efficient transfers of excess power to undersupplied regions. Transmission lines also suffer high losses. Revenues from the sector remain low, and the government sets higher tariffs on industry to cross-subsidise the very low tariffs it imposes for household sector electricity. Use of poor quality inputs, particularly low grade unwashed coal, outdated fuel burning and generation technology and poor environmental controls contribute to low production efficiency and significant environmental degradation (US Department of Energy, 2002; World Bank, 2001).

In response to these difficulties, the Government continued reforming the power sector in the late 1990s, although the state still owns the vast bulk of generating and distribution assets. In 1997 and 1998, the State Power Corporation replaced the Ministry of Electric Power Industry as the owner of most electricity assets and attempted to increase the role of commercial decision making.¹⁸ Due to inappropriate incentives for regional power authorities to commission new power projects, the sector had excess supply in the late 1990s. Responding to this, in 1998 and 1999, the authorities closed many small inefficient power plants and halted approvals of new power generating capacity until early 2002 (US Department of Energy, 2002).¹⁹ These closures also have helped address some

¹⁸ The State Power Corporation now controls the power assets of the former Ministry, representing two-thirds of China's total installed generation capacity and generating approximately one-half of China's power. For more details, see East Asia Analytical Unit, 1998 and Canadian Department of Foreign Affairs and International Trade, 2001c.

¹⁹ However, since much generation capacity already was approved and under construction when this moratorium was imposed, power plant construction did not stop completely in this period (US Department of Energy, 2002).

serious environmental problems. In an attempt to inject greater financial responsibility, the Government also is corporatising some power enterprises and allowing some private investment into the sector. As a result, some analysts believe prices now generally reflect long run marginal costs of supply (World Bank, 2001).²⁰ However, the sector still face significant challenges, including needing to develop further the power sectors' legal and regulatory framework, particularly regarding approvals, contracts, pricing and payment, before more private and foreign investors will enter the sector (US Department of Energy, 2002; World Bank, 2001).

WTO ENTRY IMPACTS ON INFRASTRUCTURE

WTO entry will cut import tariffs on infrastructure goods and further liberalise FDI access to sectors including power generation and transport (Table 6.3).

Table 6.3

Less Restrictions on Foreign Infrastructure Investment Latest Official Chinese Guidelines to Foreign Infrastructure Investment, Selected Sectors, April 2002^a

Infrastructure sector	Nature of limitation in place, if any
Encouraged sectors^b	
Constructing and managing thermal power stations with stand-alone capacity exceeding 300 000 KW, coal-fired stations adopting clean combustion technology, combined thermo-electricity stations, natural gas fired stations and hydro-powered stations	None
Constructing and managing nuclear power stations	Chinese partner must have majority ownership share
Constructing and managing renewable energy power stations	None
Constructing and managing city water plants	None
Constructing and managing water projects for use of hydraulic resources	Chinese partner must have majority ownership share
Constructing and operating backbone railway networks	Chinese partner must have majority ownership share
Constructing and managing lateral and local railways, as well as bridges, tunnels and ferry facilities	Limited to joint equity and joint contractual ventures
Constructing and managing highways, independent bridges and tunnels, and public wharf facilities	None
Constructing and managing civil airports	Chinese partner must have majority ownership share

²⁰ The Chinese Government began reforming electricity pricing as early as the mid 1980s, increasingly bringing the sector onto a cost-recovery basis. In the late 1990s, as well as applying extra fees for industry upgrading and new projects, such as the Three Gorges hydroelectric scheme, the Government adjusted prices to meet variations in fuel and transportation costs, to cover new loans for power plants and raised prices for residential and industrial users with high capacity demand (Chandler et al., 1998). The authorities also reduced the responsibility of power generators for employee social welfare programs.

Infrastructure sector	Nature of limitation in place, if any
Establishing air transportation company	Chinese partner must have majority ownership share
Air transport related to agricultural sector	Limited to joint equity and joint contractual ventures
Marine transport	Foreign equity limited to less than 40 per cent
Multi modal highway containers	Foreign equity limited to less than 50 per cent until 11 December 2002; majority ownership allowed after that and wholly owned businesses allowed after 11 December 2005
Highway freight	Majority foreign shares allowed after 11 December 2002 and wholly owned businesses allowed after 11 December 2004
Constructing and managing transportation related storage facilities	None
Restricted sectors^c	
Constructing and managing thermal power stations with stand-alone capacity less than 300 000 KW	Unspecified
Highway passenger transport	Unspecified
Water transport	Foreign partner restricted to 49 per cent share
Railway freight	Foreign equity limited to less than 49 per cent until 11 December 2004; majority ownership allowed after that and wholly owned businesses allowed after 11 December 2007
Railway passenger freight	Chinese partner must have majority ownership share
General airlines	Chinese partner must have majority ownership share
Prohibited sectors^d	
Constructing and managing power grids	No foreign investment permitted
Air traffic control companies	No foreign investment permitted
Postal service companies	No foreign participation permitted

Notes: a These guidelines were released in early 2002. As a general rule, all sectors not specifically identified in this catalogue of investment are permitted. Permitted sectors are those where foreign investment less than US\$30m requires only local government approval, investment between US\$30 and US\$100m only requires MOFTEC approval and investment over US\$100m requires State Council approval.

b Encouraged sectors are those where foreign investment less than US\$30m requires only local government approval and investment over US\$30m requires provincial government approval.

c Restricted sectors are those where foreign investment less than US\$30m requires only provincial government approval.

d Prohibited sectors are those where foreign investment is not approved.

Sources: State Development Planning Commission, 2002; American Chamber of Commerce, 2002.

Economic Analytical Unit commissioned modelling forecasts WTO entry, resulting increases in foreign trade and capital inflows and stronger economic growth, should substantially boost all types of infrastructure production, raising power sector annual growth by over 1 percentage point, from 7.6 to 8.9 per cent and annual transport sector growth from 8.9 to 10.3 per cent per (Table 6.4).

Table 6.4

WTO Entry Forecast to Boost Infrastructure Sectors' Performance

Infrastructure Value Added, Growth Rate and Level, Per cent and US\$ billion, 2000-2010

	Average annual value added growth rates without WTO entry 2000-2010	Increase in annual growth rates due to WTO entry 2000-2010	Absolute level of value added without WTO entry in 2010	Change in absolute level of value added due to WTO entry in 2010
	per cent	percentage points	US\$ billion, 2000 prices	US\$ billion, 2000 prices
Electricity	7.6	1.3	370.8	134.3
Transport	8.9	1.4	684.0	166.5
Other infrastructure	6.9	1.2	165.6	118.0

Sources: Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

AUSTRALIAN BUSINESS OPPORTUNITIES IN INFRASTRUCTURE

Australia's current presence in China's infrastructure sector is limited; Australia currently exports some infrastructure related goods and services but directly invests little in infrastructure. Plans for further infrastructure reform and expansion, expected growth in private infrastructure projects and continued high development assistance inflows should boost opportunities for experienced Australian infrastructure suppliers and investors. Entering as a supplier to a private multinational or development assistance project may be preferred.

Over the next five years, the Government plans to continue boosting infrastructure spending in China's western regions and expanding and upgrading China's eastern road and rail networks. Opportunities exist to supply goods and services to expressway projects linking major cities and regions and installing bulk rail and freight capacity (China.org.cn, 2001a; Canadian Department of Foreign Affairs and International Trade, 2000). By 2005, major cities including Beijing, Shanghai, Shenyang, Guangzhou and Shenzhen also plan to dramatically expand their urban transit networks. China is seeking foreign assistance with urban traffic management, signalling, computerisation and fare collection systems, although some local content requirements may remain (Canadian Department of Foreign Affairs and International Trade, 2001a).²¹

²¹ Australian-based firms already are finding success in these promising markets. The Perth-based Asia-Pacific headquarters of Swedish building systems multinational TAC is building on its success in supplying Hong Kong railway projects by picking up contracts to supply rail building management systems in Shanghai and Guangzhou (Leong, 2002).

Rapidly expanding international trade will further expand demand for port development, increasing opportunities for some Australian companies. To increase efficiency, ports are seeking to upgrade their cargo and container handling capacity and reliability in handling diverse cargoes, opening opportunities for Australian equipment and service providers.

China's airport development market is booming; by 2005, Chinese authorities plan to build at least 60 new airports and upgrade or modernise many others. The Civil Aviation Administration of China, CAAC, forecasts passenger travel will double and air cargo quadruple between 2000 and 2010 (Canadian Department of Foreign Affairs and International Trade, 2001e). Already Australian infrastructure and design service providers are tapping this market and expected future growth will further expand business opportunities.

MDA AUSTRALIA

MDA Australia is a Sydney-based firm providing cost management, project management and traditional quantity surveying services for construction projects. Since the early 1990s, MDA Australia successfully provided specialised consultancy services in China, including aircraft hangar and maintenance facilities in Guangzhou and Wuhan and industrial projects in Shenzhen and Kunming. In addition, MDA has provided reports to the Civil Aviation Administration of China for airport projects in Beijing, Shanghai and Guangzhou and master planning assistance to the authorities at Guangzhou's New Baiyun International Airport.

From its experience in China, MDA stresses the need for seeking the right contacts and establishing good working relationships. Working in China also means dealing with the language barrier, protocol and local customs; learning a few words of greeting in Chinese is well received and researching cultural issues prior to arrival in China avoids possible embarrassment. However, business meetings or technical negotiations are best left to professional interpreters. MDA is very optimistic about its future in China, particularly given China's entry to the WTO and its hosting of the 2008 Beijing Olympics; these trends are dramatically boosting demand for quality professional services.

Source: MDA Australia, 2002.

THALES ATM

Thales Air Traffic Management, Thales ATM, Australia's leading air traffic control system developer, is a wholly owned subsidiary of the French electronics multinational Thales Group. Thales ATM is the prime contractor to Airservices Australia for air traffic management systems, providing buildings and civil works, dedicated telecommunications networks, computer based training, simulators and terminal control units. It also provides radar support in eastern and south-western Australia

In September 2001, Thales ATM secured a \$200 million contract with the Civil Aviation Administration of China, CAAC, to supply more than 200 new air traffic control workstations by 2004. Training controllers and engineers in the new system mostly will be conducted in Australia; other Australian companies will contribute to the project by supplying consoles and computer hardware and software. The system will control up to 80 per cent of China's air traffic in the Beijing-Shanghai-Guangzhou air corridor once fully installed.

Source: Department of Foreign Affairs and Trade, 2002.

Chinese power authorities intend to separate power generation from transmission and distribution, breaking up integrated state owned providers. They eventually plan to sell off generating assets to joint ventures to boost competition, introduce more market oriented pricing mechanisms and establish an independent national power sector regulator to reform sector regulations (Economist Intelligence Unit, 2002a; *People's Daily*, www.english.peopledaily.com.cn, 8 May 2002).²² These plans will require significant new inflows of private and foreign capital and infrastructure services. Experienced international investors including Hong Kong's China Light and Power already have established majority owned joint ventures to develop power generation facilities in southern China (Economist Intelligence Unit, 2002c). China also plans to increase renewable power generation, offering opportunities to Australian companies supplying appropriate equipment and expertise.

However, public sector interests in power remain strong and it is unlikely the intended reform process will run smoothly; in the past, some private build-own-operate providers have encountered difficulties in negotiating commercially viable projects and securing payment (Economist Intelligence Unit, 2002a).

²² Over the medium term, the authorities would like the power industry to have four or five independent and competing national power generation companies complemented by two regional transmission companies (Economist Intelligence Unit, 2002a, 2002b).

PACIFIC POWER INTERNATIONAL

Pacific Power International, PPI, the energy services business arm of Pacific Power, formerly the Electricity Commission of NSW, is a leading Australian based provider of power project development and consultancy services to China and many other Asian economies.

PPI entered the Chinese market in 1993, when it first provided consultancy services to power plants in Jiangsu province. Over the 1990s, the provinces of Zhejiang, Hunan, Shandong and Jiangsu also contracted PPI to assess market competition, design plant improvements and provide training and technological services.

While PPI accepts the Chinese market is challenging, it is increasingly optimistic about opportunities in China. Reform is sometimes slow and commercial negotiations protracted, so extensive due diligence, in-depth research and long term commitment to the client's needs are essential. The recent slowing in the pace of power plant construction also reduced opportunities. However, PPI believes Australia is well placed to contribute to reforming the Chinese electricity industry, training technical staff, improving plant efficiency and introducing environmentally friendly and renewable technologies. To cope with expected business growth, PPI has recently set up a representative office in Shanghai.

Source: Pacific Power International, 2002.

IMPLICATIONS

WTO entry undoubtedly will benefit China's large, open and increasingly market oriented manufacturing sector and the previously closed but now also rapidly expanding and opening infrastructure sector. Increased import competition, improved export market access, fewer restrictions on foreign capital inflows and private local investors, ongoing structural reforms and a strengthening business environment should boost manufacturing and infrastructure output, productivity and investment. Nevertheless, Chinese authorities are aware they must continue addressing key issues challenging manufacturing and infrastructure's efficiency to sustain current growth rates.

Strong output growth and import and investment liberalisation should boost opportunities for Australian manufacturing and infrastructure businesses to access the Chinese market. However, strong import competition and China's low per capita incomes may limit short term demand for many higher value Australian manufactures, though markets will grow for unique consumer goods and high value products used by business. Australian infrastructure services business should find increasing opportunities as Chinese infrastructure sectors restructure and modernise, although market and regulatory frameworks and the operating environment will remain challenging.

REFERENCES

- Air International, 2002, Information supplied to Economic Analytical Unit, Melbourne, September.
- American Chamber of Commerce, 2001, *AmCham 2001 White Paper*, www.amcham-china.org.cn, accessed May 2002.
- , 2002, 'Legal Brief – China's New Catalogue Guiding Foreign Investment', www.amcham-China.org.cn, accessed September 2002.
- Briginshaw, D., 2000, 'Chinese Railways Back in Profit Ahead of Target', *International Rail Journal*, March 2000, www.railjournal.com, accessed June 2002.
- British Embassy Beijing, 2001, 'China Ports Briefing – 2001', www.britishembassy.org.cn, accessed June 2002.
- Canadian Department of Foreign Affairs and International Trade, 2000, 'China: Urban Transit for the 21st Century', www.tcm-mec.gc.ca, accessed June 2002.
- , 2001a, 'Highway Development and Intelligent Transport Systems in China', www.tcm-mec.gc.ca, accessed May 2002.
- , 2001b, 'Rail and Urban Transit Infrastructure Development and Equipment in China', www.tcm-mec.gc.ca, accessed May 2002.
- , 2001c, 'The Electrical Power Market in China', January 2001, www.tcm-mec.gc.ca, accessed June 2002.
- , 2001d, 'The Seaport Development and Shipbuilding Market in China', February 2001, www.tcm-mec.gc.ca, accessed June 2002.
- , 2001e, 'The Aerospace and Airport Development Markets in China', February 2001, www.tcm-mec.gc.ca, accessed September 2002.
- CEIC, 2002, CEIC database, supplied by Econdata, Canberra, accessed July 2002.
- CEM International, 2002, Information supplied to Economic Analytical Unit, Melbourne, August.
- Central Intelligence Agency, 2002, 'The World Factbook – China', www.cia.gov, accessed August 2002.
- Centre of Policy Studies, 2002, Consultancy supplied to Economic Analytical Unit, Melbourne, May.
- Chandler, W., Y. Guo, J. Logan, Y. Shi and D. Zhou, 1998, 'China's Electric Power Options: An Analysis of Economic and Environmental Costs', Advanced International Studies Unit, Pacific Northwest National Laboratory, www.pnl.gov, accessed June 2002.
- China.org.cn, 2001a, 'Development of China's Transport Network', June 2001, www.china.org.cn, accessed June 2002.

- , 2001b, 'Reform and Development of China's Railway Sector', January 2001, www.china.org.cn, accessed June 2002.
- , 2002a, 'More Highways to be Built in China's West', 12 March 2002, www.china.org.cn, accessed June 2002.
- , 2002b, 'Crucial Year for Highways in West: Communications Minister', 12 March 2002, www.china.org.cn, accessed June 2002.
- CSR, 2002, Information supplied to the Economic Analytical Unit, Shanghai, June.
- Department of Foreign Affairs and Trade, 2002, *Trade Objectives and Outcomes Statement 2002*, Commonwealth of Australia, Canberra.
- East Asia Analytical Unit, 1998, *Asia's Infrastructure in the Crisis, Harnessing Private Enterprise*, Commonwealth of Australia, Canberra.
- Economic Analytical Unit, 2002, forthcoming, *East Asia Restructures* (working title), Department of Foreign Affairs and Trade, Canberra.
- Economist Intelligence Unit, 2002a, 'Breaking up the State Power Corp monopoly', 26 April 2002, www.viewswire.com, accessed July 2002.
- , 2002b, 'Power politics', 7 June 2002, www.viewswire.com, accessed July 2002.
- Harbour and Marine Engineering, 2002, Information supplied to Economic Analytical Unit, Melbourne, October.
- Ianchovichina, E. and W. Martin, 2001, 'Trade Liberalization in China's Accession to the WTO', March 2001, paper provided to Economic Analytical Unit.
- Leong, L., 2002, Economic Analytical unit interview with General Manager, TAC Pacific (Hong Kong), Hong Kong, February.
- MDA Australia, 2002, Information supplied to the Economic Analytical Unit, Sydney, July.
- National Bureau of Statistics, 2000, *China Statistical Yearbook*, China Statistics Press, Beijing.
- , 2001, *China Statistical Yearbook*, China Statistics Press, Beijing.
- Pacific Power International, 2002, Information supplied to the Economic Analytical Unit, Sydney, June.
- Spear, A., C. Nailer, S. He, 1997, 'China Infrastructure: Sectoral Plans, Reforms and Financing', East Asia Analytical Unit, Commonwealth of Australia, Canberra.
- State Development Planning Commission, 2002, 'Foreign Investment Catalogue', www.sdpc.gov.cn, accessed July 2002.
- TradeData International, 2002, Consultancy supplied to Economic Analytical Unit, Melbourne, June.
- US Department of Energy, 2002, 'Country Analysis Brief – China', June 2002, www.eia.doe.gov, accessed June 2002.

- US Trade Representative, 2002, 'National Estimates of International Trade Barriers 2002 - China', www.ustr.gov, accessed May 2002.
- Wang, Z., 2002, Economic Analytical Unit interview with Director and Executive Vice President, Guangdong Development Bank, March, Guangzhou.
- World Bank, 2000, 'Railway Reform in China: The Great Railway Challenge', www.worldbank.org, accessed June 2002.
- , 2001, 'New Wave of Power Sector Reform in China', workshop report, February 2001, published in conjunction with State Development Planning Council, www.worldbank.org, accessed June 2002.
- , 2002a, 'World Bank World Tables', database accessed from CEIC database, supplied by Econdata, Canberra, accessed August 2002.
- , 2002b, 'Railways Database: Railway data table', www.worldbank.org, accessed June 2002.
- World Cargo News, 2002, 'China ports move up rankings', January 2002, www.worldcargonews.com, accessed August 2002.
- World Trade Atlas, 2002, *Global Trade Information Service* database, accessed June 2002.
- World Trade Organization, 2001a, *International Trade Statistics 2001*, Geneva, www.wto.org, accessed May 2002.
- , 2001b, 'Reservations by WTO members', December 2001, www.wto.org, accessed June 2002.
- , 2001c, 'Most Favoured Nation Tariff – Other Products', December 2001, www.wto.org, accessed July 2002.
- , 2001d, 'Most Favoured Nation Tariff – Staging Matrix for Other Products', December 2001, www.wto.org, accessed July 2002.
- , 2001e, 'Most Favoured Nation Tariff – Tariff Quotas', December 2001, www.wto.org, accessed July 2002.
- , 2001f, *Working Party Report on the Accession of the People's Republic of China*, December 2001, www.wto.org, accessed January 2002.
- Wu, J. 2001, 'Ten Focal Problems in the 10th Five-Year Power Plan', article by official of State Development Bank, State Power Corporation website, www.sp-china.com, accessed June 2002.
- Zhai, F. and S. Li, 2000, 'The Implications of China's Accession to WTO on China's Economy', paper presented at conference on 'China's Accession to the WTO: An Overview of Recent Analyses', October 2000, Chinese Academy of Social Sciences, Beijing.

APPENDIX

Table 6A.1

Tariffs on Manufactured Imports Declining

Import Tariffs for Selected Manufactured Goods, Per cent, 2002–2006

Product	Rate prior to WTO entry	1 January 2002	1 January 2003	1 January 2004	1 January 2005	Final bound rate
Motor vehicles with engine capacity under 3000cc ^a	80	43.8	38.2	34.2	30	25
Motor vehicles with engine capacity over 3000cc ^a	100	50.7	43	37.6	30	25
Motor vehicle engines (between 1000cc and 3000cc)	45	25.8	20.5	15.3	10	10
Most other motor vehicle parts ^b	6-50	6-31.4	6-25	6-22.9	6-18.6	6-10
Optical fibres and cables	12	3	0	0	0	0
Ultrasonic apparatus	11-15	5-9	4-7	4-7	4-7	4-7
Pumps for liquids	12	10	10	10	10	10

Notes: a Motor vehicle imports also are subject to a quota until 2005; see Appendix Table 6A.2 for details. Motor vehicle import tariffs fall to 28 per cent on 1 January 2006 and to 25 per cent on 1 July 2006.

b Motor vehicle parts tariffs continue falling till 1 July 2006, when they all reach between 6 per cent and 10 per cent.

c Motor vehicle engines are subject to a quota until 2004; see Appendix Table 6A.2 for details.

Sources: World Trade Organization, 2001d, 2001e.

Table 6A.2

Other WTO Trading Arrangements for Manufactured Products

Product	Nature of commitment	Implementation
Motor vehicles	Import quotas to be progressively removed	By 2005
Motor vehicle engines	Import quotas to be progressively removed	By 2004
Urea, NPK and other fertilisers	Import quotas to be liberalised under a system of tariff quotas for urea and NPK, and removed for other fertilisers	By 2002
Bus and car tyres	Import quotas to be progressively removed	By 2004
Yarn and fibres	Import quotas to be removed	By 2002
Airconditioners, refrigerators, video machines, tape and sound systems, televisions and video cameras, washing machines and televisions	Import quotas to be removed	By 2002
Bulldozers, road rollers and mining power shovels	Import quotas to be progressively removed	By 2004
Paper making machinery	Import quotas to be progressively removed	By 2004
Carding and combing machinery	Import quotas to be removed	By 2002

Sources: World Trade Organization, 2001d, 2001e.

Table 6A.3

WTO Entry Forecast to Boost Manufacturing’s Performance

Manufacturing Value Added, Growth Rate and Level, Per cent and US\$ billion, 2000-2010

	Average annual value added growth rates without WTO entry 2000-2010	Increase in annual growth rates due to WTO entry 2000-2010	Absolute level of value added without WTO entry in 2010 US\$ billion, 2000 prices	Change in absolute level of value added due to WTO entry in 2010 US\$ billion, 2000 prices
	per cent	percentage points		
Manufacturing^a	8.7	1.4	934.4	123.3
Cotton textile	7.9	0.6	19.7	1.2
Wool textile	8.1	0.7	8.8	0.6
Clothing	9.6	0.5	27.2	1.4
Motor vehicles and parts	9.0	1.9	33.0	6.3
Other manufacturing	9.0	1.4	589.6	81.9

- Notes:
- a The value added of listed manufacturing sectors do not sum to the figure for total manufacturing as not all manufacturing sectors are shown.
 - b The first column shows projected growth in manufacturing value added and its major components over the next ten years if China did not enter the WTO.
 - c The second column shows how the growth trend is predicted to change as a result of China entering the WTO. For example, the average annual growth rate of manufacturing value added is projected to be 1.4 percentage points higher during each of the ten years following China’s entry to the WTO.
 - d The third column shows the forecast size of Chinese manufacturing value added and its major components in year 2000 US\$ billion prices in 2010 if China did not enter the WTO.
 - e The fourth column shows the forecast gain in size of Chinese manufacturing value added and its major components in year 2000 US\$ billion prices in 2010 as a result of China entering the WTO. For example, total manufacturing value added is projected to be US\$123.3 billion higher in 2010 than otherwise.

Sources: Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

Immediate Manufactured Export Opportunities

The Economic Analytical Unit commissioned detailed analysis of Australian and Chinese trade data for this report. Using commodity specific Australian manufactured export prices, Chinese import prices, Australian export growth and Chinese import growth, this analysis assessed Chinese market size and Australian export capacity and the potential for growth in Australian exports into the Chinese market across all manufactured products. A commodity is considered a very strong export opportunity if it meets all four of the criteria.

This analysis highlights some immediate new opportunities for Australian manufactured exporters; these opportunities are based on a combination of price and trade growth differentials and established Australian market presence. The analysis also provides an estimate of likely market potential for Australian exporters over a five year horizon. The most prospective opportunities are ranked by potential market size in Table 6A.4.

Table 6A.4

Immediate Manufactured Export Opportunities for Australia

TradeData International Analysis of Australian Export Potential in China

Commodity	Ratio of Chinese imports to Australian exports ^a	Australian market share of Chinese imports ^b Per cent	Chinese relative import growth ^c Per cent	Price gap ^d Per cent	Potential ^e (US\$ million)
Meeting all four criteria					
Parts for taps, cocks, valves and similar appliances	6.9	1	10	100	7.4
Water filters or purifiers	9.6	1	13	648	7.3
Ethylene polymer plates, sheet, strip and foil	8.3	1	0	21	6.2
Parts for liquid and gas filters and purifiers	7.4	4	5	28	5.9
Paper and paperboard scrap	6.7	1	1	43	3.7
Retail photographic chemicals	1.8	1	45	32	3.6
Coaxial cable and conductors	2.9	1	16	52	3.2
High voltage electrical apparatus for switching or protecting electrical circuits	2.2	1	36	25	2.6
Stearic acid	8.1	2	109	31	2.5
Human medical vaccines	1.9	5	10	197	2.3
Retail hormone medicines	9.5	1	126	103	2.1
Retail penicillin medicines	2.4	2	84	20	1.8
Numerically controlled metal sharpening machines	1.2	3	43	2	1.3
High voltage electrical isolating switches and make-and-break switches	7.7	1	38	146	1.2
Low voltage generating sets with compression-ignition internal combustion piston engines	7.5	2	28	21	1.1
Machinery for the preparation of fruits, nuts of vegetables	7.8	4	9	200	1.1
Plastic fittings for tubes, hoses and pipes and pipes	1.5	1	50	37	0.9
Flexible plastic tubes, hoses and pipes	5.6	3	5	60	0.6

Notes: a This column gives the ratio of Chinese imports of the commodity to total Australian exports of the commodity, over the period 1998-2001.

b This column measures the share Australian exports hold of Chinese imports of the commodity, over the period 1998-2001.

c This column gives the difference between Chinese import growth for the commodity and Australian export growth for the commodity, over period 1998-2001.

d This column shows how much higher the average Chinese import price is compared to the average Australian export price of the commodity, over the period 1998-2001.

e This column shows potential Australian exports to China of this commodity in year five if Australia was to gain an extra 5 per cent market share over the next five years.

Source: TradeData International, 2002.

OPPORTUNITIES IN SERVICES

KEY POINTS

- China's large services sector now accounts for just over 30 per cent of the Chinese economy. China also is an increasingly prominent global services trader, but the Chinese authorities have limited foreign investment in services, apart from in real estate.
- WTO entry saw China commit to far reaching service sector reforms, agreeing to facilitate services trade and open many more service sectors to foreign participation. Over the next decade, these and other reforms and ongoing income growth should further boost services sector growth, producing a broad range of business opportunities for Australian service providers.
- Despite improved foreign access to main street banking and other financial services, entrenched domestic competitors, numerous new foreign entrants and high capital requirements will make these challenging sectors. Australian financial services providers, including in insurance, securities and funds management, may find promising opportunities in developing niche financial products and providing consulting and restructuring assistance to Chinese institutions.
- Growing incomes, increasing openness and a growing gap between demand and supply in China should maintain growing demand for education services delivered in Australia. Also, Australian educational institutions should find good opportunities to offer courses in China.
- The number of Chinese tourists to Australia also should continue to grow rapidly, due to Australia's competitiveness and increasing Chinese incomes and openness. Australian tour operators will need to design tailored packages for particular market segments in this increasingly competitive market.
- While China is strong in information and communications technology, ICT, production, Australia's innovative ICT service application and adaption skills can succeed in China's market.

- China's immense and growing environmental challenges will provide increasing opportunities for Australian environmental service businesses, particularly in areas like agricultural and mining rehabilitation, sustainable farming and air and water treatment.
- Professional services demand is increasing strongly as the Chinese economy matures and grows. Although barriers remain, China has committed to further open these markets; already many Australian professional services firms are succeeding in China. Australian firms also may find opportunities in supporting the restructuring of China's underdeveloped logistics and distribution networks.

China's rapidly expanding services sector is becoming increasingly important to the Chinese economy and WTO entry will open services to foreign participation more than any other sector. As a result, services sector productivity and growth will increase, providing Australian suppliers with opportunities in financial services, education, tourism, environment, professional services, logistics and distribution.

OVERVIEW OF THE CHINESE SERVICES SECTOR

In 2000, services sector value added reached US\$320 billion, or almost 31 per cent of gross domestic product (CEIC, 2002).¹ In 2000, over 195 million people worked in service industries, accounting for almost 28 per cent of the workforce, up from 25 per cent in 1995 (Chinese National Bureau of Statistics, 2001).

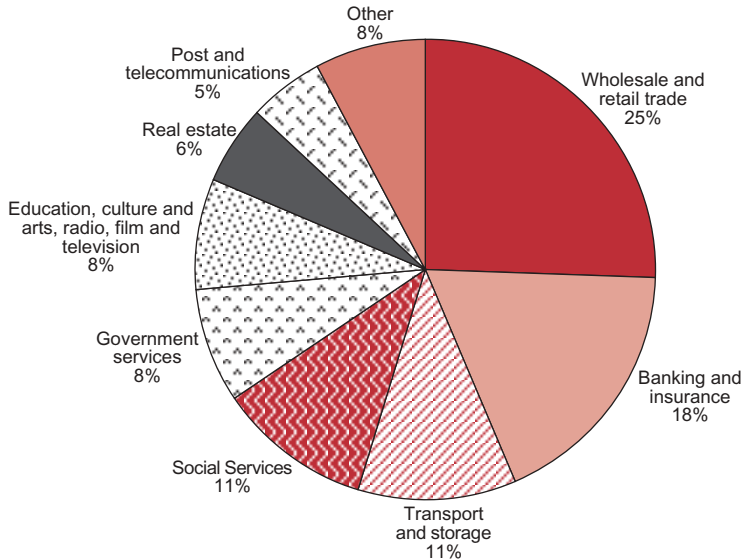
Structure and Recent Performance

Wholesale and retail trade, banking and insurance, transport and storage, and social services dominate Chinese services, accounting for more than two thirds of the sector (Figure 7.1).

Figure 7.1

Four Sectors Dominate Services Industry

Shares of Services Sector Value Added, Per cent, 1999



Note: 'Other services' includes health care; sport; social welfare; scientific, research and technical services; services related to agricultural and mineral sectors; and government agencies, parties and social organisations.

Source: Chinese National Bureau of Statistics, 2001.

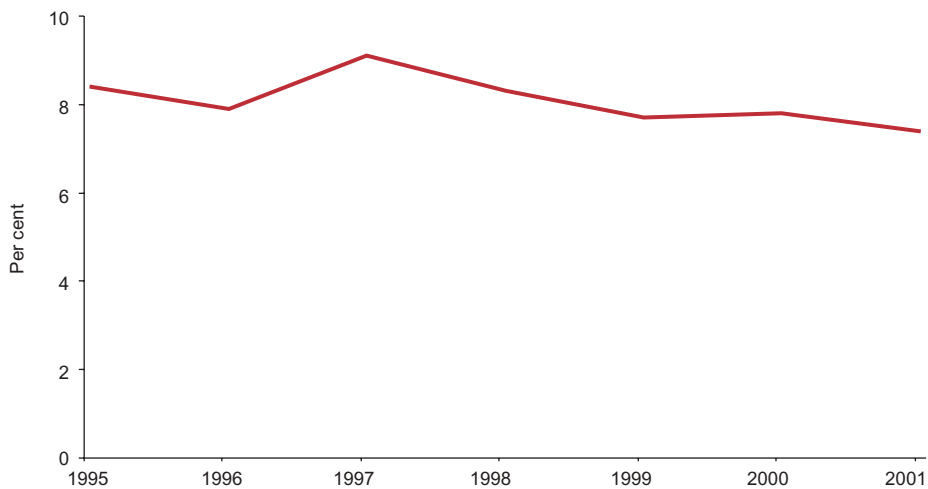
¹ Services industries include transport, storage, post and telecommunications, wholesale and retail trade, banking and insurance, real estate, tourism, information technology services, culture and arts, scientific research, government agencies and Party organisations, and social services including health care, sports, social welfare and education (Chinese National Bureau of Statistics, 2001).

After peaking at over 12 per cent per year in the early 1990s, between 1995 and 2001, services sector value added growth slowed to an average of 8 per cent (Figure 7.2). Growth in transport, storage and social services sectors slowed most; postal services and telecommunications, education, culture and the arts sectors continued growing strongly, partly offsetting this trend (Chinese National Bureau of Statistics, 2001).

Figure 7.2

Services Growth Still Strong But Slowing

Annual Real Tertiary Sector Value Added Growth, Per cent, 1995-2001



Source: CEIC, 2002.

Exposure to Foreign Trade and Investment

China also increasingly trades in services; in 2000, it was the world’s twelfth largest exporter and tenth largest importer, accounting for just over 2 per cent of global services trade (World Trade Organization, 2001a).² In 2001, inward bound tourism, worth almost US\$18 billion, accounted for more than 50 per cent of total service exports and transport exports reached US\$4.6 billion. In 2001, China imported services worth almost US\$40 billion, 64 per cent of which were outward bound tourism and transport services, with insurance, royalties and consultation purchases growing strongly from small bases (CEIC, 2002).

² This is an increase from a share of 1.6 per cent in 1995. During this period, China witnessed particularly dramatic growth in its share of global travel and other services (World Trade Organization, 2001a).

FOREIGN INVESTMENT IN CHINESE SERVICES BEFORE WTO ENTRY

Investment in real estate and social services dominates total services foreign direct investment, FDI, totalling US\$18 billion between 1997 and 2000. Most of this FDI came through significant purchases of land and property, particularly hotels, by overseas Chinese. Prior to WTO entry, authorities tightly restricted FDI in many other service sectors, limiting inflows to US\$13.9 billion, or a mere 6.3 per cent of total inflows, between 1997 and 2001.

Nevertheless, many foreign wholesale, retail and distribution firms invest in China, as do legal, accountancy, consulting and other professional services firms, although until recently these could only service multinational clients. Authorities also have licensed around 200 foreign banking and other finance operations, but restrict their activities and limit their investment levels; until recently, less than 30 of these banks were licensed to conduct local current, *renminbi*, business. More recently, architecture, design, construction and information and communications technology firms are entering in increasing numbers, although authorities require them to operate with a local partner.

Portfolio investment in services also is growing as Chinese firms seek foreign equity as part of restructuring efforts. Beginning in 1999, authorities allowed several telecommunications and banking firms to list overseas and form strategic partnerships to boost capital and technology.

Sources: CEIC, 2002; Hale, 2002; Luo, 2001; Chinese National Bureau of Statistics, 2001.

IMPACT OF WTO ENTRY ON CHINESE SERVICES

WTO entry will substantially reshape the Chinese services sector, making services trade easier and allowing foreigners to enter many services industries for the first time.³ By 2008, foreigners will face less investment restrictions in banking, insurance, securities, telecommunications, professional services, wholesale, retail, logistics and tourism (Appendix Table 7A.1, Appendix Table 7A.2). Authorities also will reform laws, reduce regulation of partnerships and free up licensing and operating conditions, increasing transparency and reducing barriers to trade in services (World Trade Organization, 2001b).⁴

Increased foreign competition should boost the efficiency of local service providers, reduce services prices and hence expand services demand. By 2010, Economic Analytical Unit commissioned modelling forecasts WTO entry will boost services sector value added by just over US\$100 billion, to US\$900 billion (Figure 7.3, Appendix Table 7A.3).

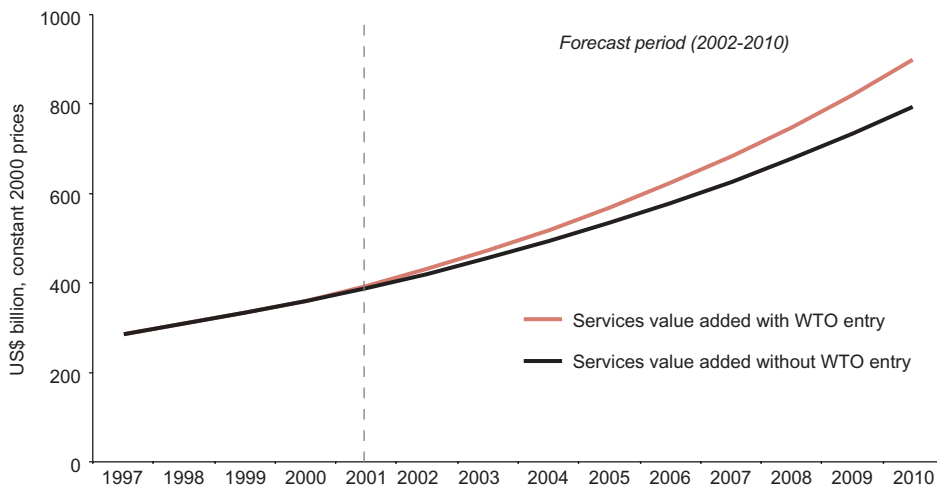
³ Companies previously found such restrictions a considerable impediment to developing strong services business in China; until WTO entry, foreign service providers were largely restricted to operations under the terms of selective 'experimental' licences (US Trade Representative, 2002).

⁴ For further details of China's liberalisation of services trade under WTO entry, see Appendix Table 7A.1 and Chapter 1 – *Doing Business*.

Figure 7.3

WTO Entry Should Expand Services Output

Actual and Forecast Services Value Added, US\$ billion, Constant 2000 prices, 1997-2010



Sources: World Bank, 2002; Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

Improving services sector productivity also will boost other economic sectors’ efficiency and demand for Australian goods and services. For example, a more efficient financial sector should help private manufacturing and other businesses grow by providing better access to finance. A stronger sales and distribution network should boost agricultural and food processing sector productivity. A dynamic telecommunications sector and a better educated population will benefit knowledge based firms’ growth.

AUSTRALIAN BUSINESS OPPORTUNITIES BY SECTOR

China’s opening of its services sectors promises opportunities for Australian firms in financial services, education, tourism, information and communications technology, environmental services, a variety of professional services and logistics and distribution.

Financial Services⁵

WTO entry will open the fast growing finance sector to much more foreign participation, spurring much needed restructuring and benefiting Australian providers. Under the WTO accession agreement,

⁵ See *Asia’s Financial Markets, Capitalising on Reform*, East Asia Analytical Unit, 1999, and *China Embraces the World Market, Achievements, Constraints and Opportunities*, East Asia Analytical Unit, 1997, for a discussion of previous reforms in the finance sector.

in addition to reducing general barriers to services, authorities gradually will lift most restrictions on FDI in direct banking, insurance securities and funds management services (Appendix Table 7A.2). By 2007, authorities gradually will reduce many business restrictions on foreign banks, insurance companies and securities ventures. The Government also committed to reduce or remove many branching and licensing restrictions.

Economic Analytical Unit commissioned modelling forecasts that, as a result of WTO entry, the finance sector will grow 1.5 percentage points more quickly than without WTO entry (Appendix Table 7A.3) (Centre of Policy Studies, 2002). Australia's highly competitive financial sector is well placed to benefit from these opportunities.

Banking

While the four major state owned banks still dominate the banking sector, more efficient and nimble local and foreign joint venture competitors increasingly challenge the market position of these banks (Brooks, 2002; Wong, 2002) (Figure 7.4).⁶

BANKING SECTOR REFORMS

In the 1990s, authorities started reforming the banking sector, limiting government-directed credit allocation, freeing up interest rates, making banks' management more responsible for their commercial decisions, establishing asset management companies to purchase and dispose of older non performing loans, lifting accounting, credit risk and disclosure standards, improving staff incentives and increasing bank management responsibility.⁷ (See Chapter 2 - *Economic Overview*.)

Authorities also plan to further corporatise and eventually partially sell shares in the major banks; some commentators expect authorities will list the overseas arms of the state commercial banks by the end of 2003.⁸ Encouragingly, major banks' non performing loan ratios are gradually falling, staffing levels are more manageable and the share of lending to the private sector continues to expand rapidly, although from a low base.

Sources: East Asia Analytical Unit, 1999; Godwin, 2002; Brooks, 2002; CEIC, 2002; Chinese National Bureau of Statistics, 2001.

⁶ The more prominent of these newer domestic banks include Minsheng Bank, the Bank of Shanghai, the Bank of Communications, Beijing Commercial Bank, Shenzhen Development Bank and Shanghai Pudong Development Bank; most of these firms are either listed on the sharemarket or have private investors. Recent People's Bank of China statistics suggest Minsheng Bank is now the largest lender in the Shanghai region, and in 2000, Minsheng's new loan book was half the size of China Construction Bank's, an institution with assets 15 times larger (*Yahoo Asia*, www.asia.news.yahoo.com, 28 June 2002; Brooks, 2002). Foreign banking institutions with a significant presence in China include HSBC, Standard Chartered and Citibank.

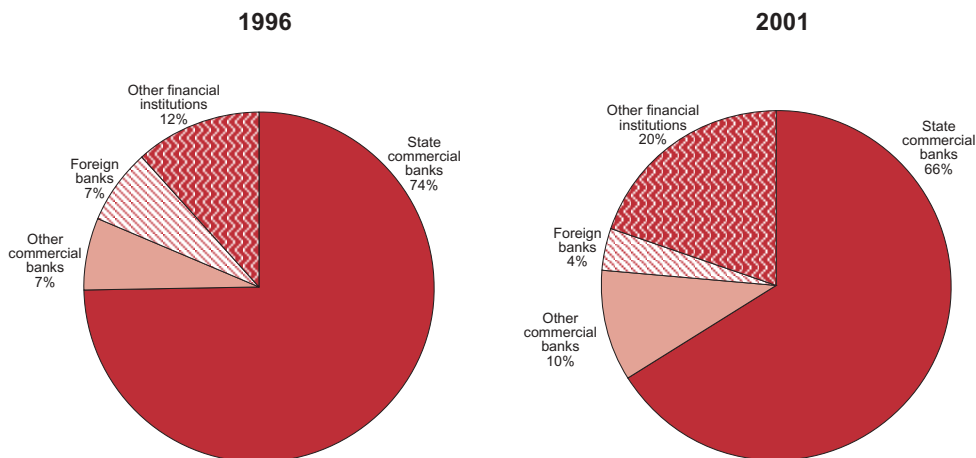
⁷ As part of the rationalisation, authorities also ordered major banks to scale down their operations in provincial towns, since they are keen to see smaller financial institutions grow in regional areas to stimulate competition and better service small and medium enterprise (Canadian Department of Foreign Affairs and International Trade, 2001).

⁸ In July 2002, the Hong Kong arm of China's largest bank, the Bank of China, listed 25 per cent of its capital on the Hong Kong Stock Exchange. The Bank of China (Hong Kong) is the second largest banking institution in the Hong Kong Special Administrative Region and the first of China's four major state banks to partially privatise.

Figure 7.4

Smaller Banks Taking Big Four Market Share

Share of Financial Sector Loans, By Financial Institution Ownership, Per cent, 1996 and 2001



Source: CEIC, 2002.

Insurance

China's large state owned insurance companies hold between 80 and 90 per cent of the local insurance market (Cheng, 2000; Luo, 2001).⁹ However, the Chinese insurance market is only in its infancy, with premium revenues accounting for less than 2 per cent of GDP (Chinese National Bureau of Statistics, 2001).¹⁰ Industry quality is variable; some local insurers have payout obligations that exceed their capital and investment returns and the shortage in actuarial skills is serious.¹¹

Smaller, usually majority state owned, stock holding insurers like Tai Kang Life, Sinosafe Insurance, Hua An and Guotai are beginning to gain a larger share of the strongly growing market, but still are restricted by limited business licences (US Department of Commerce, 2002). Also, around a dozen foreign insurers, including CMG Asia, part of the Commonwealth Bank of Australia, are building a joint venture presence (*People's Daily*, www.english.people.daily.com.cn, 13 December 2001; Cheng, 2000).¹²

⁹ The large state owned or controlled insurers are the People's Insurance Company, China Re, China Life, China Pacific Insurance and Pingan Insurance.

¹⁰ This compares to figures of 7.6 per cent in Australia (Australian Prudential Regulatory Authority, 2002a, 2002b; CEIC, 2002).

¹¹ Some commentators suggest that only 30 per cent of insurance industry employees have formal insurance education and China has less than 100 qualified actuaries (Luo, 2001; China Concept Consulting, 2002; Shanghai Star, www.chinadaily.com.cn/star, 4 October 2001; Fung, 2002).

¹² Other international insurers present include American International Group, United States of America, Manulife, Canada, Wintherthur, Switzerland and Tokyo Marine, Japan.

INSURANCE SECTOR REFORMS

The Government is reforming the insurance sector, readying it for increasing foreign competition.¹³ Authorities are boosting industry efficiency by providing job training for industry staff, seconding experienced supervisors to larger state owned institutions, encouraging improved corporate governance and diversifying ownership in stock holding insurance firms. They also are increasing industry competition by issuing more licences to domestic and foreign firms and insurance brokers and permitting reinsurance firms to establish operations.

Insurance firms now can invest in a wider range of assets, including government backed corporate bonds, shares and mutual funds. Insurance companies are restructuring their branch networks and closing unviable businesses to improve returns. However, authorities still limit foreign and local insurers' exposures to particular markets and impose limits on where they invest their premiums, reducing investment performance.

Sources: Li, 2002a; ChinaOnline, 2000a; *People's Daily*, www.english.peopledaily.com.cn, 25 January 2000.

Securities

The Chinese securities industry has expanded dramatically since the first stock market was opened in the early 1990s; presently, about 1 200 companies are listed and total sharemarket capitalisation is equivalent to about 50 per cent of GDP (CEIC, 2002). However, the Chinese securities market is still only developing; the vast majority of listed companies are majority state owned and only about 30 per cent of their capital is listed on the market. Also, regulators frequently uncover fraud and mismanagement.¹⁴ Further, most securities firms presently are state controlled and face many challenges due to low levels of technology, inexperience in underwriting and with derivatives and generally poor staff skills (Chen, 2002).

SECURITIES MARKETS REFORMS

Authorities recognise they must continue reforming the Chinese stock market for it to become an efficient means of raising and allocating capital. Opaque listing practices, conflicts of interest and insider trading remain prevalent and some commentators and investors regard the market more as a casino than a means of allocating capital. Moreover, regulations still are evolving and enforcement mechanisms remain relatively weak. However, the China Securities Regulatory Commission is making important progress in improving listing rules, regulation and governance oversight; it is more vigorously enforcing delisting procedures, boosting minority shareholder protection and upgrading its regulatory and surveillance capacities.

Sources: Economic Analytical Unit, 2002a; Zhu, 2002; Yu, 2001; Cha, 2001; *People's Daily*, www.english.peopledaily.com.cn, 4 December 2000, 12 February 2001.

¹³ Two important early industry reforms included enacting the new 1995 Insurance Law and, in 1998, establishing the China Insurance Regulatory Commission to regulate and oversee policy development for the insurance industry (East Asia Analytical Unit, 1999).

¹⁴ For example, in December 2001, regulators fined Zhejiang Securities for illegal trading activities and, in August 2002, the People's Bank of China closed down Anshan Securities, a small brokerage firm in northern China, for undisclosed irregularities (*Asian Wall Street Journal*, www.online.wsj.com, 13 August 2002).

Business opportunities

China's strong economic growth, financial sector restructuring and increasing openness will drive demand for more advanced products and services to improve business efficiency and better compete with new entrants. Australia has a very competitive financial sector; as well as supplying innovative products and services, Australian companies also can assist Chinese financial institutions address restructuring challenges.

ANZ

ANZ, Australia's third largest bank, is the only Australian bank licensed to operate in China. It received licences to provide foreign currency services to foreign companies in Shanghai in 1993 and Beijing in 1997, after first opening a representative office in Beijing in 1986. In August 2000, ANZ obtained its local currency *renminbi* licence to provide local currency services to foreign firms. In June 2002, as part of improved banking sector access under WTO entry, ANZ successfully obtained its licence to conduct foreign currency business with Chinese residents and businesses. ANZ offers local and foreign currency deposit accounts, local and foreign currency loans and foreign currency exchange services, money transfer and remittance services and a range of trade-related services including structured import and export finance facilities, letters of credit, bonding and guarantees.

Over time, ANZ China's business focus changed significantly, from initially offering only foreign currency services to Australian and New Zealand customers, to using its local currency *renminbi* licence to service these customers' domestic currency business. Since 2000, ANZ also has moved into new areas of business, including financing trade in strategic commodities like oil, iron ore, alumina, wheat, barley and wool and financing major Chinese companies' international trade operations. Over the past two years, ANZ also has increased its Chinese staff component to improve operations and lower costs.

Despite considerable remaining foreign banking restrictions, ANZ is establishing links with several complementary domestic institutions to expand its services. With the likely continuing expansion in trade and investment flows in and out of China resulting from recent reforms and WTO accession, ANZ is looking forward to continuing to grow its Chinese business.

Source: ANZ, 2002.

In banking, foreign firms progressively can enter China's markets over the next five years (Appendix Table 7A.2). Initially, foreign banks are limited to dealing with corporate customers and in selected geographic locations, but by 2007 can deal in all currencies with all corporate and retail customers in all locations. However, as foreign banks enter and domestic banks restructure their large branch networks over the next few years, financial markets will remain very competitive and large new capital and other requirements will moderate business opportunities in main street banking.¹⁵

Forward-looking Australian financial institutions are seeking financial opportunities in new markets such as housing finance, where Chinese demand is expanding rapidly, and in providing assistance to Chinese banks to improve systems and restructure operations.¹⁶ China's larger banks are upgrading and expanding their ATM and credit card networks and seeking innovative technologies to improve service and reach customers in rural areas; Australia's considerable expertise in dealing with restructuring, installing new technologies and addressing large geographic distances in service provision may assist Chinese institutions meet these demands.

MACQUARIE BANK

Macquarie Bank entered China in the mid 1990s, initially providing innovative housing finance solutions and since diversifying into managed funds and project financing. It started by developing property in Tianjin through its managed China Housing Investment Funds, CHIFs, and became the first foreign or local company to securitise mortgage finance. Macquarie continues to tap the rapidly growing Chinese housing market; to date, the CHIFs have funded more than 2 500 residential apartments. In 2002, Macquarie also joined with AMP Henderson Global Investors to develop similar products in Shanghai, where they are currently building and financing mortgages for 772 apartments.

In early 2002, Macquarie formed a joint venture with Schroeders Asian Properties LP, creating a funds management business specialising in developing residential property. Recently, through an agreement with the China Construction Bank, Macquarie became the first foreign firm in the Shanghai mortgage market to provide mortgage brokerage and associated services.

Macquarie finds China an exciting and challenging market. While complex bureaucratic, corporate and legal requirements, contract difficulties and differing partner expectations make China a challenging business destination, Macquarie is optimistic about future developments in this key market.

Source: Macquarie Bank, 2002.

¹⁵ The new capital requirements for banking operations are outlined in Appendix Table 7A.4. Other limitations on banking operations include comprehensive licence qualifying criteria, government controls on the currency mix of lending and on deposit and lending interest rates, and a poorly developed interbank market that charges higher interest rates to foreign banks on foreign currency transactions (*Wall Street Journal*, www.online.wsj.com, 31 May 2002; Hale, 2002). Bankers express fears that these regulations may limit their local currency lending capacity and expansion plans (Economist Intelligence Unit, 2002b; *South China Morning Post*, 5 August 2002, Business Section II, p.1).

¹⁶ For example, in July 2002, Sydney-based AIMS Home Loans announced it would be entering China, having recently completed a three-year feasibility study on the Chinese mortgage market (AIMS Home Loans, 2002).

Post WTO entry, foreign insurance firms face less restrictions on their participation in the local insurance market; this greater openness and more demand for insurance products should generate significant opportunities for foreign insurers and pension providers (Appendix Table 7A.2).¹⁷ Australian businesses also may find opportunities in providing actuarial training and investment risk management.¹⁸ Also, China's demographic structure will begin to age rapidly after 2010, potentially driving increasing demand for pension products as the welfare system is further restructured (Hale, 2002).

With WTO accession, foreign institutions also can manage investment funds and deal in securities although, even after 2005, they can only hold between 33 and 49 per cent of ventures in these sectors (Appendix Table 7A.2). However, domestic securities firms increasingly seek partnerships with foreign securities firms to upgrade their performance and prepare for more competition in coming years. Particular areas where they seek assistance include underwriting, derivatives, market research, cross border transactions, mergers and acquisitions and financing (Chen, 2002; *Wall Street Journal*, www.online.wsj.com, 13 August 2002).¹⁹

Also, some larger Chinese firms are raising foreign capital, with corporations including China Mobile, Sinopec and the Hong Kong arm of the Bank of China raising billions of dollars in Hong Kong and New York markets in 2000, 2001 and 2002. Future raisings may provide opportunities for Australian securities firms, underwriters and institutional investors.

Education and Training

China's education sector is immense; in 2001, almost 600 000 institutions provided education to over 220 million primary, secondary and higher institution students (CEIC, 2002). China's educational attainments, although still lower than developed countries, continue to improve (Figure 7.5).

¹⁷ However, foreign insurance firms still will be limited to minority shares in life insurance businesses. Also, capital and other requirements for new insurance ventures are quite high.

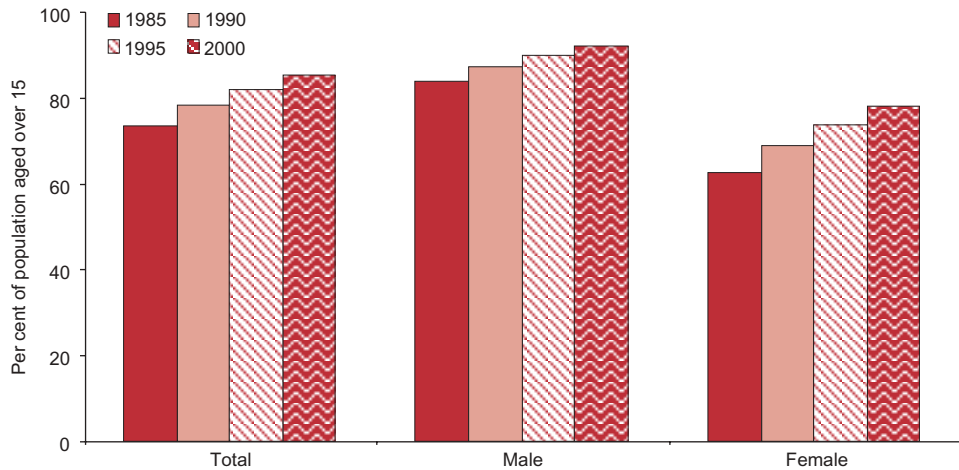
¹⁸ Investment and risk management will become increasingly important if authorities continue to loosen restrictions on where insurance firms can invest premium income.

¹⁹ Already, major international financial institutions including Credit Lyonnais, BNP Paribas and Citigroup are discussing joint ventures and cooperation with Chinese securities firms (*Wall Street Journal*, www.online.wsj.com, 13 August 2002).

Figure 7.5

Chinese Literacy Continuing To Improve

China's Literacy Rate, Total, Male and Female, Per cent of population aged over 15, Selected Years



Source: United Nations Educational, Scientific and Cultural Organisation, 2002.

EDUCATION SECTOR REFORMS

Since the mid 1990s, the Government has vigorously reformed the education system, merging hundreds of secondary and post secondary education institutions and passing control to local and provincial authorities to improve oversight and outcomes. Authorities are raising salaries, demanding teachers become computer literate, commencing entrance tests and five-year refresher courses to improve teacher quality and moving away from rote learning to a more rounded curriculum. The Ministry of Education also is exploring ways to encourage schools and universities to invest in distance and on-line education as alternatives to classroom based education.

These reforms are improving outcomes. Enrolments in the compulsory schooling years of primary, years one to six, and junior secondary, years seven to nine, are high and increasing as a proportion of school age children. Both postgraduate and undergraduate higher education enrolments also are expanding strongly, although from a very small base, doubling as a proportion of the total population between 1997 and 2001.

Sources: CEIC, 2002; China Education and Research Network, 2001; *People's Daily*, www.english.peopledaily.com.cn, 6 November 2000; ChinaOnline.com, 2000b.

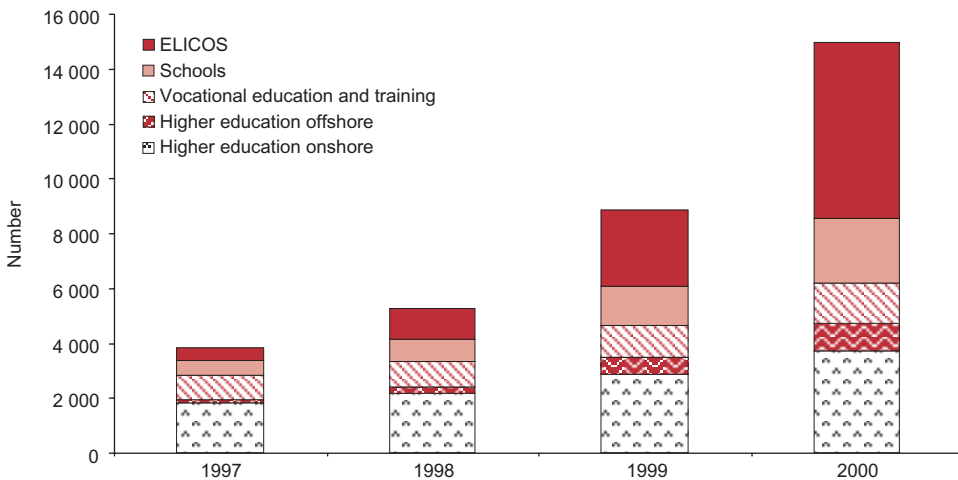
However, demand for high quality education still outstrips supply. Despite increasing to around 3 per cent of GDP in 2001, government spending on education is low compared to OECD averages and the education sector currently cannot meet demand (Chinese National Bureau of Statistics, 2001; Sinopolis, 2002; Australian Education International, 2001a).²⁰ For example, in the late 1990s, only around one-third of junior high school graduates could be placed in senior high school and only one in ten senior students found a place in higher education institutions (Australian Education International, 2001a).²¹

Consequently, authorities are becoming more receptive to private and foreign institutions filling the significant education and training gap, although formal barriers still remain. As a result, demand for overseas education is growing rapidly, with over 100 000 Chinese students travelling abroad each year to study (Australian Education International, 2001a). Foreign institutions also are establishing many education and training operations in China; already, Australian education institutions have established over 400 joint ventures in China (Australian Education International, 2001a).

Figure 7.6

Chinese Student Numbers in Australian Education Institutions Growing Rapidly

Number of Chinese Students in Australian Education Institutions, Selected Categories, 1997-2000



Notes: 'ELICOS' is English Language Intensive Courses for Overseas Students. 'Higher education onshore' students are those taught in Australia; 'Higher education offshore' students are those taught in Australian institutions in China.

Source: Australian Education International, 2001b.

²⁰ Rural schools are particularly poorly serviced; teachers can go unpaid for considerable periods, facilities are poor and rural student drop-out rates are much higher than in urban areas (Pepper, 2000).

²¹ Moreover, China has a serious lack of technically or vocationally trained employees, with surveys showing very few workers, even in major centres including Beijing and Shanghai, have received formal training (Australian Education International, 2001a).

Since the late 1990s, through combined efforts on the part of Australia's many education institutions, Australian Education International, Austrade and the Department of Immigration and Multicultural and Indigenous Affairs, Chinese student numbers in Australia grew dramatically. In 2000, China was Australia's fifth largest student market, sending almost 15 000 students to Australian education institutions (Figure 7.6). English Language Intensive Courses for Overseas Students, ELICOS, schools and offshore higher education recently exhibited particularly strong growth; in 2000, China became Australia's largest source of overseas ELICOS and school students (Australian Education International, 2001b).

More recent estimates suggest even stronger growth in the years since; by 2002, China may well have become Australia's number one source of overseas students, with around 30 000 Chinese students in Australia and about another 4000 studying Australian higher education courses in China. Moreover, there may be around 10 000 Chinese students studying Australian vocational education and training courses and up to 1000 students at Australian schools in China (Department of Education, Science and Training, 2002a).

Economic Analytical Unit commissioned modelling forecasts China's education sector value added will grow 1 percentage point per year faster in the next ten years as a result of WTO entry (Appendix Table 7A.3) (Centre of Policy Studies, 2002). While China made only minor concessions on foreign educational investment under WTO commitments and Australian providers still must partner with local institutions and businesses, given the already strained nature of the Chinese education system, continued strong growth implies increased opportunities for Australian education and training providers. Particular opportunities exist in delivering mainstream programs and specialised courses for government officials in Australia, plus joint ventures delivering tailored programs and English language courses in China. Australia also has strong capabilities in distance education and is well placed to supply online learning systems to China.

LA TROBE UNIVERSITY

La Trobe University is a leading Australian international university, with over 2 000 on-shore international students and 200 active links to universities in many Asian countries. Research in China covers areas as diverse as health, culture, law and archaeology. About 400 students from China are enrolled at La Trobe, mainly studying business, English, commerce, health, information technology or management. La Trobe also offers an MBA and a Master of Health Administration in Mandarin, allowing Chinese managers to study in Australia for 12 months.

La Trobe also delivers courses in China in applied linguistics, health administration, nursing and business. Courses are attended by 3 500 students in 25 Chinese cities across 14 provinces and the Hong Kong SAR. La Trobe also has a leading role in the International Education Network, a consortium comprising La Trobe, Deakin and Flinders Universities, the University of Tasmania, North Melbourne Institute of TAFE and the Australian Centre for Languages.

La Trobe advises caution when choosing partners, particularly through building relationships with people you trust and maintaining clear lines of communication and responsibility. Continuing challenges include managing growing numbers in China while maintaining quality and securing visas and repatriating funds in a timely way.

Source: La Trobe University, 2002.

AUSTRALIAN CENTRE FOR LANGUAGES

Sydney-based Australian Centre for Languages, **acl**, is one of Australia's largest private providers of English language training, currently delivering programs to around 12 000 students annually. A large part of its annual intake is through the Adult Migrant English Program, but **acl** also provides courses to students from China, Thailand, Taiwan, Korea and a variety of other Asian, South American, Middle Eastern and European countries.

acl's Chinese student population expanded in the late 1990s as new Australian visa regulations opened the market and **acl** obtained pre-qualified institution status; growth since that time has been extraordinarily strong. Chinese students mainly attend **acl** to equip them with English for Australian university study, particularly postgraduate courses. **acl** generally recruits students through its representatives in China, where it has built up a strong network of Chinese Government approved education agents.

As well as expanding onshore business, **acl**, as part of an Australian education consortium, now provides English language courses in the Chinese cities of Beijing, Nanjing, Shenyang, Fuzhou and Dalian. **acl** has recently signed an **acl**English Solutions^a contract with Huazhong University of Science and Technology in Wuhan, one of China's top ten universities. While **acl** notes the strongly regulated nature of the Chinese education market, the variable character of Chinese market demand and the importance of official contacts, **acl** is very positive about its future in the Chinese student market.

Source: Australian Centre for Languages, 2002.

Note: a **acl** English Solutions is a suite of integrated multimedia resources for English language learning available online and in the classroom, using a variety of media.

China also currently lacks sufficient vocational training, with the large school leaver population facing few opportunities outside the university system and tradespeople receiving minimal training (Hopkins, 2002). China recognises the need to substantially reform its vocational education and training system and Chinese officials have been studying Australia's competency based approach with a view to adopting key elements. Australia's substantial network of vocational trainers is well placed to supply this market.

CENTRAL TAFE

Central TAFE, the largest and oldest technical and further education, TAFE, college in Western Australia, enrolls over 16 000 students annually, with around 600 international students in courses throughout Asia. In 1999, Central TAFE began running English courses in Anhui province in China for school leavers and government officers intending to study abroad. Since then, Central TAFE expanded into other provinces and now runs e-commerce and international businesses courses in Zhejiang, is training government and enterprise staff in international trade and WTO matters and currently is exploring opportunities in Shanghai, Nanjing and Chongqing.

As with other providers, Central TAFE identifies establishing strong personal relationships as critical. Difficulties in enforcing contracts, seeking arbitration and remitting foreign exchange create risks. However, Central TAFE is very optimistic about its future in China.

Source: Central TAFE, 2002.

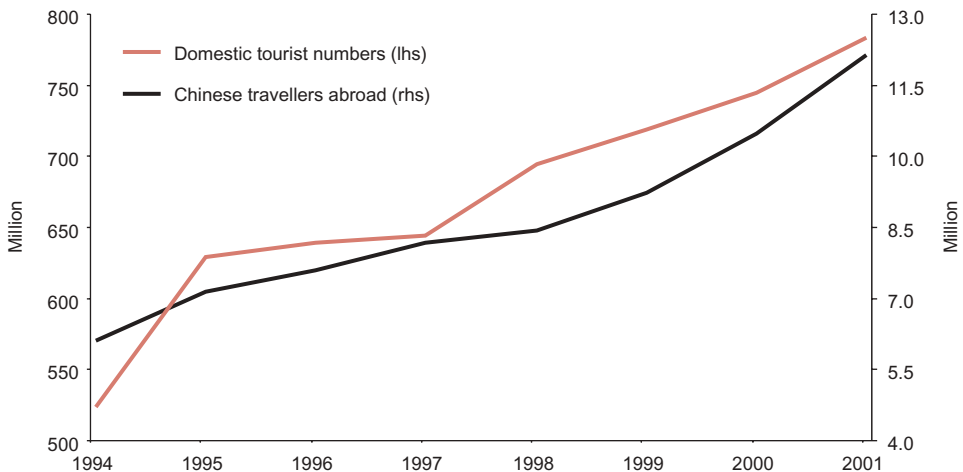
Tourism

Expanding incomes and looser restrictions on domestic and international travel are driving a booming tourism industry (Figure 7.7). Between 1994 and 2001, domestic and international Chinese tourist numbers expanded by 6 per cent per year. Over the same period, the proportion of the Chinese population travelling internally rose from 44 per cent to 61 per cent and the proportion travelling abroad doubled to 1 per cent (CEIC, 2002).

Figure 7.7

Chinese Domestic and Foreign Tourism Booming

China's Domestic and Foreign Tourist Numbers, Million, 1994-2001



Source: CEIC, 2002.

China increasingly is an important tourist market for Australia, ranking as our seventh largest source of visitors in 2001; by 2005, industry forecasts expect China will be Australia's fifth largest market and our largest market by 2010 (Tourism Forecasting Council, 2002). Group holiday travel, business delegations and company-paid incentive travel are China's three primary traveller types (Australian Tourism Commission, 2002).²² Australia is one of about 30 officially approved destinations for Chinese tourists and other key competitors, including major European economies and the United States, also are boosting their Chinese market penetration and vigorously seeking approved destination status (Boote, 2002). Successful Australian tourist operators continue to target the traditional business delegation and technical visits while capitalising on the now fast growing leisure-only travel market. China's continued strong income growth and increasing access to international travel will rapidly boost the self funded travel sector.

AUSTRALIAN TOURIST COMMISSION

With over 170 000 Chinese visitors to Australia in 2001 and recent annual growth averaging over 30 per cent, the Australian Tourist Commission, ATC, sees China as one of the most important emerging markets for inbound tourism. Already China is Australia's seventh largest source of visitors and Australia ranks as one of China's top ten tourist destinations. In 1999, Chinese authorities selected Australia under the approved destination system. The ATC actively markets Australia to China's increasingly free travellers. Chinese travellers perceive Australia as having a great natural environment, unspoiled beauty and good tourism infrastructure that can offer unique and interesting experiences.

By 2005, China is likely to be Australia's fifth largest source of tourists, behind only New Zealand, United Kingdom, United States and Japan. A 1999 ATC survey showed 3 out of 10 residents of Beijing, Shanghai and Guangzhou would like to travel abroad, but only 2 out of 10 have been outside China before, mostly on short trips to Hong Kong and Macau; this indicates further potential for strong growth.

Whilst this potential is encouraging, the ATC stresses tourism providers must undertake extensive market research, commit long-term and build a wide relationship network. Also, Asia still dominates as a destination for Chinese travellers and similarly priced and highly regarded European destinations provide strong competition, especially given substantial available airline capacity and a wide variety of destinations on a single visa.

Source: Australian Tourism Commission, 2002b.

²² Study tourism also is emerging as a promising market (Department of Education, Science and Training, 2002a).

Opportunities also will arise in providing tourism services in China. Driven by China's considerable tourist attractions and increasing openness to private travel, China already is the fastest growing and fifth largest global tourist destination.²³ By 2007, WTO accession will further open the Chinese tourism sector to foreign participation, including hotel and restaurant development, travel agencies and tours (Appendix Table 7A.2). Economic Analytical Unit commissioned modelling forecasts WTO entry will boost Chinese tourism growth to over 9 per cent annually, raising industry value added to over US\$100 billion by 2010 (Centre of Policy Studies, 2002).

However, in many regions, China's tourism infrastructure is still underdeveloped, requiring significant investment in capacity, services and technology to meet rapidly increasing demand; Government intervention in the industry also is widespread (Luo, 2001). Australian businesses can provide many relevant services to the tourism sector, particularly in the lead up to the Beijing Olympics in 2008; Australia's status as a recent and very successful Olympic host provides an ideal platform for building tourism networks. Major areas of opportunity include hospitality training, hotel management and tour development, management and marketing.²⁴

Information Communications and Technology²⁵

The Chinese information and communication technology, ICT, market developed rapidly over the 1990s, growing by more than 27 per cent annually between 1993 and 2001; by 2001, ICT expenditure exceeded US\$66 billion (International Data Corporation, 2002). The telecommunications sector is expanding particularly rapidly; fixed and mobile subscriber numbers grew by almost 50 per cent annually between 1995 and 2001 (International Telecommunications Union, 2001a, 2001b). Despite this extraordinary growth, ICT products' penetration generally is low. Nevertheless, the Chinese Government sees the ICT and e-commerce sectors as key to medium term economic prospects.

Information technology industry

China's IT sector is expanding rapidly and currently is one of the largest personal computer markets in the world. While penetration remains low by developed country standards, it is high given China's per capita income; by mid 2002, one in five urban Chinese households had a computer (CEIC, 2002).²⁶ Furthermore, Chinese IT goods production is well developed, driven by strong multinational investment and China's cost-effectiveness in assembly operations. Competitive labour costs, generally sound infrastructure and favourable government policies support this industry's competitiveness. Domestic brands supply around half of China's personal computer sales.

²³ In 2001, over 33 million international visitors travelled to China, with Japan, Korea, Russia and the United States the major source countries (World Tourism Organisation, 2002; China National Tourism Administration, 2002).

²⁴ For example, Victoria's William Angliss TAFE and its consulting arm, Angliss Consulting, are providing hospitality and tourism training and professional development programs through a rapidly expanding program in Shanghai and Nanjing (William Angliss TAFE, 2002).

²⁵ For a more detailed treatment of information communications and technology opportunities in China, see the Economic Analytical Unit's publication, *Connecting with Asia's Tech Future: ICT Export Opportunities* (Economic Analytical Unit, 2002b, forthcoming). The following information is largely drawn from this report.

²⁶ However, over all of China, only about one in fifty people had a computer (International Telecommunications Union, 2001c).

By contrast, China's IT services industry, including software development, consultancy and training, is less developed; domestic companies supply only about 30 per cent of the market and imports are responsible for the remainder (Economic Analytical Unit, 2002b, forthcoming). This implies expanding opportunities for Australian IT service suppliers; Australian companies are very effective at using their own or 'off the shelf' software and technology and adapting them to meet local demands and applications. Australian IT services firms also may find opportunities in providing computer and applications training to local businesses and individuals, although local IT firms are much more competitive in the training market and Australian business opportunities will likely be limited to advanced training.

WTO accession allows foreign firms to enter the software services sector via joint ventures with domestic companies; foreign participation in hardware installation, consultancy and data processing services is unrestricted (Appendix Table 7A.2).²⁷ With WTO entry, China also became a signatory to the Information Technology Agreement, committing to eliminate tariffs on IT products by 2005; this should open further opportunities for Australian IT goods providers.

Telecommunications

By mid 2002, China had over 200 million fixed line telephone subscribers, placing it on a par with the United States as the world's largest fixed line market (CEIC, 2002; International Telecommunications Union, 2001a). Also, in 2001, China overtook the United States to become the world's largest mobile phone market (Figure 7.8). By mid 2002, total mobile phone subscribers reached more than 180 million (CEIC, 2002). However, despite these very high numbers, telecommunications penetration remains low; only 14 in every 100 Chinese people have a fixed phone line and only 11 in every 100 have a mobile phone subscription (International Telecommunications Union, 2001a, 2001b).²⁸

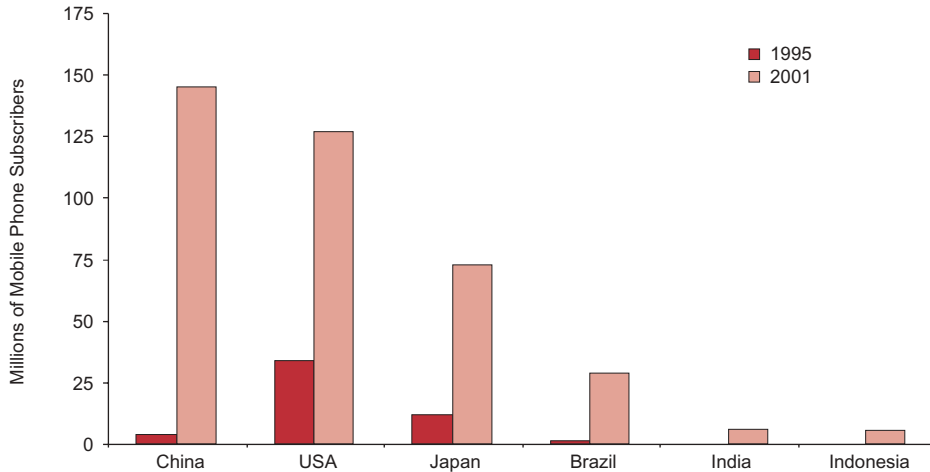
²⁷ Foreign personnel employed to provide ICT services must be certified engineers, hold a bachelor's or higher degree and have three years of experience in these fields (World Trade Organization, 2001c).

²⁸ Fixed line penetration in the United States is 66 per 100 people and 52 per 100 people in Australia (International Telecommunications Union, 2001a). Mobile phone penetration in the United States is 44 per 100 people and 57 per 100 in Australia (International Telecommunications Union, 2001b).

Figure 7.8

China's Mobile Subscribers Growing Exponentially

Number of Mobile Phone Subscribers, Million, Selected Countries, 1995 and 2001



Source: International Telecommunications Union, 2001b.

WTO entry allows minority foreign equity shares in key sectors including mobile phone and fixed line services, paging and value adding.²⁹ Authorities also committed to gradually lift geographic restrictions on foreign telecommunications investment over a two to five year period.³⁰ (See Appendix Table 7A.2.) However, large state owned players, including China Telecom and China Netcom, dominate the telecommunications industry, making the competitive environment for new entrants extremely challenging (Economist Intelligence Unit, 2002a).

Already Australian firms are active in supplying telecommunications services to Chinese firms and these opportunities should expand as the Chinese economy grows and further restructuring occurs. However, the market is extremely competitive, with most major international telecommunications firms present in China. Also, telecommunications policy is still evolving and recent restructuring in the industry is yet to be bedded down.

²⁹ Prior to WTO entry, authorities banned FDI in telecommunications.

³⁰ Starting with access to Beijing, Guangzhou and Shanghai and slowly spreading to other major cities.

TELSTRA

Telstra has been operating in China since the mid 1990s and established a representative office there in 1999. As well as providing telecommunications services to Australian multinationals, Telstra examined options for developing mobile networks and cable television. In the late 1990s, responding to increasing competition and uncertain regulations, Telstra focused on its key strengths as an integrated carrier, specialising in providing high quality services and technical applications. Chinese telecommunications companies already have their own networks but are looking to improve efficiency by going beyond basic voice services. Telstra believes that it is well placed to meet these emerging needs through the value-added services it already offers.

Telstra believes frequent changes in complex laws and regulations create risks for telecoms firms. Also, to receive preferential tax and customs treatment, authorities have insisted firms undertake manufacturing investment; this disadvantages Telstra which focuses on services activities. Despite these challenges, Telstra remains confident of its strategy in the China market.

Source: Telstra, 2002.

Environment

In the post 1949 period, and particularly given rapid growth since 1978, poorly conceived land management and industrial policies and weak environmental risk management degraded China's air, water and land quality.³¹ (See Chapter 4 – *Agriculture and Agribusiness*.) In recent years, the response to these growing challenges has created strong demand for environmental services.

Government anti-pollution policies also drive demand for environmental services. Chinese authorities increasingly recognise the need to improve environmental outcomes and, since 1997, have closed thousands of heavily polluting factories and mining operations.³² (See Chapter 5 – *Minerals and Energy*.) Authorities have introduced much stricter laws and regulations on water, air, solid waste, noise and marine pollution (Canadian Department of Foreign Affairs and International Trade, 2001).³³ They also are working closely with international aid agencies to reduce pollution, creating demand for subcontractors and service and equipment suppliers.

³¹ Some estimates suggest that environmental degradation is costing China 8 to 12 per cent of GDP per year, while spending on the environment is only around 1 per cent of GDP (Canadian Department of Foreign Affairs and International Trade, 2001).

³² In the late 1990s, the State Environment Protection Agency was upgraded to full Ministerial rank, reflecting the increased priority the Government gives to the environment. However, given resource constraints, the authorities have had to deal with environmental problems on a selective basis; for example, China's ninth Five Year Plan, 1996-2000, focused on a '3-3-2-1' program, cleaning up three lakes, three rivers, two acid rain control zones and one city (Canadian Department of Foreign Affairs and International Trade, 2001).

³³ However, effective enforcement remains a challenge as central laws and regulations rely on local government action; in many cases, regulatory enforcement poses a threat to local government enterprises' employment and profitability.

China's WTO entry opened environmental service exports and investment to foreign companies, although foreign investors must joint-venture with a Chinese company.³⁴ Australian environmental suppliers are accessing opportunities addressing agricultural environmental degradation, developing large environmental infrastructure projects such as municipal waste water treatment plants and providing other environmental solutions.³⁵ Opportunities also exist in supplying technologies to control water and air pollution, introduce sustainable farming techniques and reclaim degraded mining land (Canadian Department of Foreign Affairs and International Trade, 2001). Growing automobile ownership also should increase demands for controlling automotive emissions on locally made cars in the years ahead. However, financing and currency constraints, competitive local suppliers in some sectors, strong international competition and challenging bidding processes can make succeeding in environmental service markets difficult (US Department of Commerce, 2002).

CARDNO MBK

Cardno MBK is one of Australia's leading engineering consulting companies with offices throughout Australia and the Asia Pacific region. It employs over 350 staff and its major project groups include urban design, environment and water, transport and structures.

After a Chinese trade delegation visit to Logan City in Queensland, Cardno MBK secured its largest project in China in 2000, tendering for and winning the design contract for a part-World Bank funded waste water treatment plant in the major north-eastern city of Shenyang. To date, Cardno MBK has completed conceptual and preliminary designs for the project and is soon to start on detailed design work. Following international competitive bidding, construction is slated to start in late 2003 and the project to be completed in 2005.

Since 1989, Cardno MBK's other activities in China have included installing a pavement management system in Shenzhen, near Hong Kong, providing technical engineering support for transportation sector projects including ring road construction in Hangzhou, Zhejiang province and tendering for a number of other projects including port and industrial park design work for the city of Qinzhou in Guangxi province. Despite business challenges such as securing payment and non-transparency, Cardno MBK regards China as a promising future market and is currently drawing up a strategic plan for further expansion.

Source: Cardno MBK, 2002.

³⁴ Foreign companies can own the majority share in such a venture. For more details, see Appendix Table 7A.2.

³⁵ For example, a number of Australian environmental firms have built successful operations in China. China is a major overseas market for Greenspan Technology, a designer and manufacturer of water monitoring equipment. Baltec Systems established a design and manufacturing operation in Shanghai that now supplies industrial gas flue cleaning equipment to numerous smelters and power stations across China. Also, Heritage Seeds is building a strong business selling seeds to prevent environmental degradation. (See Chapter 4 – *Agriculture and Agribusiness*.)

Professional Services

The growing sophistication, transparency and market orientation of China's economy is driving strong demand for quality professional services. Many international professional services firms have established sizeable China practices to service the needs of their clients in this new market. Although China opened up a wide range of professional services as part of its WTO entry package, significant restrictions still remain on foreign participation; authorities will only gradually remove these.³⁶

Foreign investors' and traders' increasing recourse to the court and arbitration systems for commercial matters increases demand for commercial legal services. However, foreign lawyers still cannot practice Chinese law and face geographic restrictions until 2003. Also, modified licensing conditions and recently introduced restrictions on arbitration and dealing with Government departments may further significantly limit foreign lawyers' business scope (*Far Eastern Economic Review*, 29 August 2002, p.26).

HUNT AND HUNT LAWYERS

Hunt & Hunt has been assisting foreign companies in China and Chinese companies investing overseas since 1987. In early 1998, Hunt & Hunt was granted a licence to open a representative office in Shanghai. Hunt & Hunt advises clients on drafting joint venture, technology licensing and land use agreements in both English and Chinese, and the establishment of wholly foreign-owned enterprises. They also assist foreign companies in arbitration proceedings in China and with the enforcement of arbitral awards in the two countries.

China's regulatory environment is complex and has not always been amenable to foreign businesses. Also, foreign law firms face numerous legal, geographical, hiring, tax and other restrictions. While China's accession to the WTO is expected to result in progressive reduction of these restrictions, authorities are increasing regulation of licensed foreign law firms. Therefore, while WTO accession should bring about greater market access for foreign firms, it also will be accompanied by greater accountability and administrative requirements. Nevertheless, Hunt & Hunt is confident that there are considerable opportunities in China, due to the strong professional image of Australian lawyers and the maturing and better regulated Chinese business and investment market.

Source: Hunt and Hunt, 2002.

³⁶ Professional services covered in the WTO agreement include legal, auditing, accounting, taxation, architectural, engineering, urban planning, medical, dental, management consulting, technical testing, translation and interpretation services. For more details on specific commitments, see Appendix Table 7A.2.

Similarly, while growing consumer wealth, increased multinational company presence and more stringent building and design standards boost demand for quality architectural and engineering services, foreigners cannot wholly own architecture and engineering firms based in China. Foreign taxation, urban planning, advertising and management consulting services firms also cannot wholly own an operation in China until between 2004 and 2007. Medical and dental services firms can operate only as joint ventures.

Furthermore, as professional services markets are very competitive, Australian firms need to carefully investigate market conditions and test their business plan prior to entry. Nevertheless, dozens of small Australian professional service firms operate successfully in the Chinese market and expected increases in foreign trade and investment will continue to expand these opportunities.

WOODHEAD INTERNATIONAL

Woodhead International, a multinational Australian design consulting firm, operates throughout Asia, including mainland China, providing architectural, interior and urban design, facilities planning and graphic design services. In 1991, Woodhead International met with a Chinese developer, securing a hospital project in Guangdong province and providing master plans for several large commercial Shenzhen developments. After first focusing on larger public buildings including airports, hotels, hospitals and convention centres, the company tapped strong residential construction demand which now makes up about half its Chinese business. China now accounts for about 15 per cent of total company revenues and Woodhead currently is establishing a full time office in China to capitalise on its market presence. Its recent major projects include the Qingdao Liuting Airport terminal, the Shandong Tower Hotel and Convention Centre, the Shanxi International Trade Centre Hotel and the Intercontinental Hotel in Chongqing.

Woodhead believes the 'fly-in, fly-out' approach many foreign firms adopt in China undermines trust and relationships needed to succeed. Negotiating requires patience and persistence, particularly with potential partners or clients. Woodhead finds using local architects is vital to staying competitive in the market. Ongoing challenges include securing overdue payments, building a well researched and understood client base and delays in remitting foreign exchange.

Source: Woodhead International, 2002.

Distribution and Logistics Services

China also has opened a variety of other services sectors to foreign participation, some for the first time; included in this list are distribution and logistics, incorporating retailing, wholesaling and franchising; and transport services, including some rail, road, air, waterways, maritime and freight forwarding activities. (For details, see Appendix Table 7A.2.) Economic Analytical Unit commissioned modelling forecasts WTO accession will boost these sectors' performance, with particularly large gains in retailing value added by 2010 (Appendix Table 7A.3) (Centre of Policy Studies, 2002).

Currently, China's distribution and logistics networks are highly fragmented, diminishing productivity elsewhere in the economy. China has no integrated national logistics firms; typically, transport and logistics in China involves moving goods through many pairs of hands between production and final destination.³⁷ Storage facilities typically are inadequate, particularly for perishables; this significantly reduces China's capacity to move domestic or imported agricultural products to end consumers without damage.³⁸ Inventory management and tracking largely is non-existent (China Daily, www.chinadaily.com.cn, 26 March 2002). Also, inter-provincial transport can be difficult due to local protectionism. (See Chapter 1 – *Doing Business*.)

However, international wholesaling and distribution firms such as DHL, UPS and FedEx are establishing a significant presence in some of China's largest cities and distribution points; larger Australian firms, including Mayne Group, have been present in China for a number of years.³⁹ Chinese firms also are responding to the challenge; some major manufacturers, in particular, gradually are building their own vertically integrated distribution networks (China Daily, www.chinadaily.com.cn, 26 March 2002).

China's retail and wholesale industries are progressing more rapidly than the logistics industry, although these encouraging developments are limited to major cities and other parts of China's east coast. For the vast bulk of China's population, retail purchases still are done through local village stores and will be for the foreseeable future. However, these industries are attracting significant foreign investor interest in more developed parts of China; major international retailing firms including WalMart, Tesco, and Carrefour are establishing chains of retail outlets and also developing major purchasing centres to source Chinese products for their home and third markets (Peng, 2002). These developments also are prompting the rise of modern Chinese retailers, particularly in the major cities of Beijing, Shanghai and Guangzhou.

³⁷ Most Chinese transport firms are small family run businesses; on average, these businesses have two trucks that do limited runs and have no perishable storage capacity (*Far Eastern Economic Review*, www.feer.com, 25 July 2002).

³⁸ As a result, analysts suggest that Chinese transport and logistics costs account for over 20 per cent of the retail prices of goods, compared to less than 5 per cent in the United States (US Department of Agriculture, 2002). Other reports estimate that Chinese firms hold inventories equivalent to 40 per cent of sales, compared to well under 10 per cent in developed economies (American Chamber of Commerce in Shanghai, 2002).

³⁹ However, potential entrants may need to monitor developments in government regulation; there recently have been difficulties in the postal and third-party distribution sectors that may limit the ability of foreign businesses to do business (Economist Intelligence Unit, 2002c).

These sectors are expected to expand very strongly over the next decade as Chinese distribution firms are forced to compete more vigorously and the broader Chinese business community seeks to better manage inventories, logistics costs and transport efficiency and quality. Retail and wholesale industry structure also is likely to alter substantially as foreign models become more widespread. Competition from international firms is increasing rapidly, so Australian firms may wish to focus on supplying support services, particularly in areas of competency including agribusiness storage and distribution, retail systems, inventory management and long distance transport.

IMPLICATIONS

China's rapidly growing services sector provides a wide range of promising opportunities for Australian services suppliers to meet local and multinational company demands; WTO commitments open many of these sectors to foreign participation for the first time. WTO entry also is encouraging structural reforms, which are increasing local companies' demand for advanced business, professional and financial services. However, choosing the right joint venture partner and clients and negotiating the rapidly changing governance environment remain critical to the success of these ventures.

REFERENCES

- AIMS Home Loans, 2002, 'AIMS Home Loans Joins the Long March to China', Press release, www.aimsloans.com.au, accessed July 2002.
- American Chamber of Commerce in Shanghai, 2002, '2002 Position Papers – Transportation and Logistics', www.amcham-shanghai.org, accessed September 2002.
- ANZ, 2002, Information supplied to the Economic Analytical Unit, Shanghai, July.
- Australian Centre for Languages, 2002, Information supplied to Economic Analytical Unit, Sydney, July.
- Australian Education International, 2001a, 'Perception, Information and Choice: Understanding how Chinese students select a country for overseas study', October 2001, Publication provided to Economic Analytical Unit.
- , 2001b, *Overseas Student Statistics 2000*, Department of Education, Science and Training, Canberra.
- Australian Prudential Regulatory Authority, 2002a, 'Selected Statistics on the General Insurance Industry – Year Ending December 2001', August 2002, www.apra.gov.au, accessed September 2002.
- , 2002b, 'Life Insurance Market Statistics – December 2001', www.apra.gov.au, accessed September 2002.
- Australian Tourism Commission, 2002a, 'North Asian Tourism Marketing Profiles', Publication supplied to Economic Analytical Unit, Sydney, February.
- , 2002b, Information supplied to Economic Analytical Unit, Sydney, February.
- Boote, B., 2002, Economic Analytical Unit interview with Business Development Manager – Eastern Hemisphere, Australian Tourist Commission, Sydney, February.
- Brooks, R., 2002, Economic Analytical Unit interview with Chief Country Representative, International Monetary Fund, Beijing, March.
- Canadian Department of Foreign Affairs and International Trade, 2001, 'The Environmental Industries Market in China', www.tcm-mec.gc.ca, accessed August 2002.
- Cardno MBK, 2002, Information supplied to Economic Analytical Unit, Brisbane, September.
- CEIC, 2002, CEIC database, supplied by Econdata, Canberra, accessed May 2002.
- Central TAFE, 2002, Information supplied to Economic Analytical Unit, Perth, June.
- Centre of Policy Studies, 2002, Consultancy supplied to Economic Analytical Unit, Melbourne, May.
- Cha, L., 2001, 'The Future of China's Capital Markets and the Role of Corporate Governance', Speech given by Vice Chairman, China Securities and Regulatory Commission, 18 April 2001, www.csrc.gov.cn, accessed August 2002.

- Chen, Y., 2002, Economic Analytical Unit interview with Chairman and CEO, Guangfa Securities, Guangzhou, March.
- Cheng, D. 2000, 'A Strategy for Opening Up the Chinese Insurance Industry', www.commercialdiplomacy.org, accessed August 2002.
- China Concept Consulting, 2002, 'The Post WTO Insurance Frenzy (Q1, 2002)', www.chinaconcept.com, accessed July 2002.
- China Education and Research Network, 2001, 'Education Evolution in China', September 2001, Information obtained from website, www.edu.cn, accessed July 2002.
- China National Tourism Administration, 2002, 'Foreign Visitor Arrivals by Region and Nationality 2000', Information obtained from website, www.cnta.gov.cn, accessed July 2002.
- ChinaOnline, 2000a, 'PRC Organisational Profiles: China Insurance Regulatory Commission', www.chinaonline.com, accessed July 2002.
- , 2000b, 'PRC Organisational Profiles: Ministry of Education', www.chinaonline.com, accessed August 2002.
- Chinese National Bureau of Statistics, 2001, *China Statistical Yearbook*, China Statistics Press, Beijing.
- Department of Education, Science and Training, 2002a, Information supplied to the Economic Analytical Unit, Canberra, September.
- , 2002b, Unpublished DEST student data estimates supplied to the Economic Analytical Unit, Canberra, October.
- East Asia Analytical Unit, 1999, *Asia's Financial Markets, Capitalising on Reform*, Department of Foreign Affairs and Trade, Canberra.
- , 1997, *China Embraces the World Market, Achievements, Constraints and Opportunities*, Department of Foreign Affairs and Trade, Canberra.
- Economic Analytical Unit, 2002a, *Changing Corporate Asia, What Business Needs to Know*, Department of Foreign Affairs and Trade, Canberra.
- , 2002b, forthcoming, *Connecting with Asia's Tech Future: ICT Export Opportunities*, Department of Foreign Affairs and Trade, Canberra.
- Economist Intelligence Unit, 2002a, 'Local telecoms giant splits into two', 17 May 2002, www.viewswire.com, accessed June 2002.
- , 2002b, 'Banks unite to fight currency rule', 2 August 2002, www.viewswire.com, accessed September 2002.
- , 2002c, 'Private express-delivery firms fight back', 26 April 2002, www.viewswire.com, accessed September 2002.

- Fung, A., 2002, Economic Analytical Unit interview with Treasurer and Head of Capital Markets, Asia, Commonwealth Bank of Australia, Hong Kong, February.
- Godwin, A., 2002, Economic Analytical Unit interview with Partner, Linklaters and Alliance, Shanghai, March.
- Hale, D., 2002, 'Opportunities for Financial Services Companies in China', Testimony for U.S.-China Commission, 18 January 2002, www.davidhaleonline.com, accessed September 2002.
- Hopkins, B., 2002, Economic Analytical Unit interview with Director, International Programs, Central TAFE, Perth, June.
- Hunt and Hunt, 2002, Information supplied to the Economic Analytical Unit, October, Melbourne.
- International Data Corporation, 2002, 'Digital Planet 2002', The Global Information Economy, World Information Technology and Services Alliance, Arlington, Virginia, February.
- International Telecommunications Union, 2000, 'Mobile Cellular, Subscribers per 100 People (2000)', www.itu.int, accessed June 2002.
- , 2001a, 'Main Telephone Lines, Subscribers per 100 People (2001)', www.itu.int, accessed June 2002.
- , 2001b, 'Mobile Cellular, Subscribers per 100 people (2001)', www.itu.int, accessed June 2002.
- , 2001c, 'Internet Indicators: Hosts, Users and Number of PCs (2001)', www.itu.int, accessed September 2002.
- La Trobe University, 2002, Information supplied to Economic Analytical Unit, Melbourne June.
- Luo, Y., 2001, *China's Service Sector, A New Battlefield for International Corporations*, Copenhagen Business School Press, Denmark.
- Macquarie Bank, 2002, Information supplied to the Economic Analytical Unit, Sydney, July.
- Peng, X., Economic Analytical Unit interview with Vice Director-General, Shenzhen Municipality Bureau of Foreign Trade and Economic Cooperation, Shenzhen, February.
- People's Bank of China, 2002, 'Rules for Implementing the Regulations Governing Foreign Financial Institutions in the People's Republic of China promulgated by the People's Bank of China', January 2002, Translated from the Chinese language version, www.pbc.gov.cn, accessed October 2002.
- Pepper, S., 2000, 'China's Rural Education Reform, Consequences, Remedies and Prospects', Centre for Chinese Rural Studies, www.ccrs.org.cn, accessed August 2002.
- Sinopolis, 2002, 'China's Investment in Education Reaches Highest Point in History', Information obtained from website, www.sinopolis.com, accessed July 2002.

- Stevens, R. 2002, Economic Analytical Unit interview with Director, APEC, North and South Asia, International Policy Branch, Department of Education, Science and Training, February 2002, Canberra.
- Telstra, 2002, Information supplied to the Economic Analytical Unit, Sydney, June.
- Tourism Forecasting Council, 2002, 'April 2002 Forecast', www.industry.gov.au, accessed September 2002.
- United Nations Educational, Scientific and Cultural Organisation, 2002, 'Estimates and Projections for Adult Illiteracy for Population Aged 15 and above', July 2002 Assessment, www.uis.unesco.org, accessed August 2002.
- US Department of Agriculture, 2002, *China's Food and Agriculture: Issues for the 21st Century*, www.usda.gov, accessed July 2002.
- US Department of Commerce, 2002, 'Country Commercial Guide – China', www.doc.gov, accessed August 2002.
- US Trade Representative, 2002a, 'National Estimates of International Trade Barriers 2002 – China', www.ustr.gov, accessed May 2002.
- William Angliss TAFE, 2002, Information supplied to the Economic Analytical Unit, Melbourne, October.
- Wong, S., 2002, Economic Analytical Unit interview with Chief Executive, Standard Chartered (China), March 20002, Shanghai.
- Woodhead International, 2002, Information supplied to Economic Analytical Unit, Adelaide, June.
- World Bank, 2002, *World Bank World Tables* database, CEIC database, supplied by Econdata, Canberra, accessed August 2002.
- World Tourism Organisation, 2002, 'World tourism stalls in 2001', Press release, 29 January 2002, www.world-tourism.org, accessed July 2002.
- World Trade Organization, 2001a, *International Trade Statistics 2001*, Geneva, www.wto.org, accessed May 2002.
- , 2001b, *Working Party Report on the Accession of the People's Republic of China*, December 2001, www.wto.org, accessed January 2002.
- , 2001c, 'Report of the Working Party on the Accession of China: Schedule of Specific Commitments on Services', December 2001, www.wto.org, accessed August 2002.
- Yu, S., 2001, 'China's Stock Market Being Sensibly Regulated', *Beijing Review* (online), www.bjreview.com.cn, accessed August 2002.
- Zhu, J., 2002, Economic Analytical Unit interview with officer, China Securities and Regulatory Commission, Shanghai, March.

APPENDIX

Table 7A.1

Summary of China's Major Trade Related WTO Services Commitments

Measure	Commitment	Time frame for implementation
Trade in services		
Services	Applicants will not require invitation to apply from responsible authority	Immediate
	Foreign service suppliers can form partnerships with any legal Chinese entity	Immediate
	Services trade licences will not restrict imports	Immediate
	All relevant procedures and conditions to be published prior to becoming effective	Immediate
	Application decisions will be made promptly and both successful and unsuccessful candidates notified in writing	Immediate
Foreign investment regulations		
FDI caps	Reductions to a wide variety of services FDI limits (see Appendix Table 7A.2 for details)	Progressively to 2008
Trade-related investment measures	Authorities cannot prohibit FDI because it will affect Chinese suppliers	Immediate
	All requirements for foreign exchange balancing, trade balancing, export performance, local content, technology transfer and research eliminated	Immediate

Source: World Trade Organization, 2001b.

Table 7 A.2

Services Sectors Opening to FDI

Post WTO Services Industry Foreign Ownership Limits and Conditions

Sector and qualifying criteria	Immediate post WTO accession limits	Timeframe	Final limits	Timeframe
Banking				
<i>Prudential, capital and licensing requirements^a</i>	<ul style="list-style-type: none"> • No restrictions on foreign currency services to domestic and foreign businesses • Geographic and branching restrictions partially lifted 	Immediate	<ul style="list-style-type: none"> • Able to offer full banking services to domestic and foreign corporate and individual customers • No geographic or branching restrictions 	By 2007
Insurance				
• Life	• Foreign life insurers permitted to establish 50 per cent owned venture	Immediate	• No further liberalisation scheduled	n.a.
• Non-life	• Foreign non-life insurers permitted to establish 51 per cent owned venture or branch	Immediate	• Foreign non-life insurers permitted to establish wholly owned venture or branch	By 2004
<i>Prudential, capital and licensing requirements^a</i>	• Services limited to Shanghai, Guangzhou, Dalian, Shenzhen and Foshan	Immediate	• Geographic restrictions fully removed	By 2005
Securities				
<i>Prudential and capital requirements^a</i>	• Foreign firms able to establish 33 per cent owned securities fund management businesses	Immediate	• Foreign firms able to establish 49 per cent owned securities fund management businesses	By 2005
	• No immediate concessions on securities and debt underwriting or trading	–	• Foreign firms able to establish one-third owned securities and debt underwriting and trading	By 2005
Tourism and Travel				
• Hotels and restaurants	• Majority foreign owned joint ventures permitted to construct, renovate and operate hotels and restaurants	Immediate	• Wholly foreign subsidiaries permitted	By 2006

Sector and qualifying criteria	Immediate post WTO accession limits	Timeframe	Final limits	Timeframe
Tourism and Travel (cont.)				
• Travel agency and tour operators	• Joint ventures permitted in designated resorts and Beijing, Shanghai, Guangzhou and Xi'an	Immediate (<i>operator must meet certain other criteria^b</i>)	Foreign wholly owned ventures permitted; geographic restrictions removed	By 2008 (<i>operator must meet certain other criteria^b</i>)
Education				
(including primary, secondary, higher education, adult education and other services)	Joint schools with foreign majority ownership permitted (<i>foreign providers may enter when invited by schools or other institutions</i>)	Immediate	No further liberalisation scheduled	n.a.
Information technology				
• Computer hardware consultancy	• No restrictions	–	–	–
• Software services (<i>personnel require specified qualifications</i>)	Foreign majority ownership joint ventures permitted	Immediate	• No further liberalisation scheduled	n.a.
Telecommunications				
• Basic (paging services)	• Foreign joint ventures permitted with maximum of 30 per cent ownership	Immediate	• Foreign joint ventures permitted with maximum of 50 per cent ownership	By 2004
• Mobile telephones	• Foreign joint ventures permitted with maximum of 25 per cent ownership	Immediate	• Foreign joint ventures permitted with maximum of 49 per cent ownership	By 2005
• Value-added services	• Foreign joint ventures permitted with maximum of 30 per cent ownership	Immediate	Foreign joint ventures permitted with maximum of 50 per cent ownership	By 2004
	All operations limited to Beijing, Shanghai and Guangzhou	Immediate	All geographic restrictions removed	By 2007 ^c

Sector and qualifying criteria	Immediate post WTO accession limits	Timeframe	Final limits	Timeframe
Legal	Foreign firms are limited to providing legal services through representative offices in selected cities; foreign firms are prohibited from practising Chinese law. Only one representative office per firm permitted. Representatives must have at least two years experience outside China	Immediate	Geographic and quantitative restrictions removed	By 2003
Accounting and auditing services	Foreign firms are permitted to affiliate with Chinese firms. Issuance of licences to foreigners who have passed the Chinese CPA examinations will be accorded national treatment	Immediate	No further liberalisation scheduled	n.a.
Taxation services	Foreign majority owned joint ventures permitted	Immediate	Foreign wholly owned ventures permitted	By 2007
Architecture, urban planning and engineering <i>Personnel must be registered professionals in home country</i>	Foreign majority owned joint ventures permitted	Immediate	Foreign wholly owned ventures permitted	By 2007
Medical and dental services <i>Majority of medical personnel must be Chinese</i>	Foreign majority owned joint ventures permitted; restrictions on number of ventures established 'in line with China's needs'	Immediate	No further liberalisation scheduled	n.a.
Advertising	Foreign joint ventures permitted with maximum of 49 per cent ownership	Immediate	Foreign wholly owned ventures permitted	By 2006
Logistics^d • Maritime transport services	• Joint ventures only; 49 per cent limit of foreign share; Chairman and GM to be appointed by Chinese partner	Immediate	• No further liberalisation scheduled	n.a.

Sector and qualifying criteria	Immediate post WTO accession limits	Timeframe	Final limits	Timeframe
Logistics^d (cont.)				
• Air transport services	• For aircraft repair and maintenance, joint ventures only, with Chinese side holding controlling share. Licenses subject to economic needs test	Immediate	• No further liberalisation scheduled	n.a.
• Road and rail transport	• Joint ventures only, with foreign share not exceeding 49 per cent	Immediate	• Wholly foreign owned subsidiaries permitted	• For road, by 2005; for rail, by 2008
• Storage and warehousing	• Joint ventures only, with foreign share not exceeding 49 per cent	Immediate	• Wholly foreign owned subsidiaries permitted	• By 2005
• Freight forwarding services (<i>other conditions apply^b</i>)	• Joint ventures only, with foreign share not exceeding 50 per cent	Immediate	• Wholly foreign owned subsidiaries permitted	• By 2006
Retail	Joint ventures only in selected cities and Special Economic Zones. Quantitative restrictions also applied.	Immediate	Foreign majority ownership permitted; most commodity and geographic limitations removed	By 2007
Wholesale	Joint ventures permitted, except in the distribution of books, newspapers, magazine, pharmaceuticals, pesticides, mulching films, fertilisers, crude and processed oil	By 2003	Foreign majority ownership permitted in all commodities; all geographic and quantitative restrictions removed	By 2007
Construction	Foreign majority owned joint ventures permitted	Immediate	Foreign wholly owned ventures permitted, although limited to projects financed funded by majority foreign investment, international loans and specialised projects	By 2005

Notes: a For full details of prudential and capital or other requirements, refer to World Trade Organization, 2001c.

b Refer World Trade Organization, 2001c, for full details.

c Geographic restrictions on basic and value added telecommunication services will be lifted by 2004; geographic restrictions on mobile phone services will be lifted by 2007.

d Some basic details of these liberalisations are provided in Table 6.3 of Chapter 6 – *Manufacturing and Infrastructure*.

Source: World Trade Organization, 2001c.

Table 7.A3

WTO Entry Should Boost Services Sector Growth**China's Services Value Added, Growth Rate and Level, Per cent and US\$ billion, 2000-2010**

	Average annual value added growth rates without WTO entry 2000-2010	Change in annual growth rates due to WTO entry 2000-2010	Absolute level of value added without WTO entry in 2010	Change in absolute level of value added due to WTO entry in 2010
	per cent	percentage points	US\$ billion, 2000 prices	US\$ billion, 2000 prices
Services	8.3	1.4	794.8	105.2
Communication	10.6	1.6	41.9	6.4
Wholesale	9.0	2.3	30.1	6.9
Retail	8.7	1.5	221.8	33.7
Transport	8.9	1.4	82.6	11.4
Health	6.3	1.9	18.9	3.7
Education	5.3	1.5	26.7	4.1
Finance	9.7	1.5	106.3	15.3
Insurance	9.7	1.8	11.6	2.1
Tourism related industries	7.5	1.5	94.1	13.9
Other services	6.5	1.2	120.4	14.1
Construction	10.4	1.2	161.9	18.9

Notes: Tourism related industries include hotels and restaurants, entertainment, personal services, and air and rail passenger transportation. The transport industry excludes air and rail passenger transport.

Source: Centre of Policy Studies, 2002; Economic Analytical Unit calculations.

Table 7A.4

Capital Requirements for FDI in Banking Expensive
Capital Required for Various Banking Licences^a

Licence level	Description	Capital requirement per branch ^b	General timeframe for implementation
Level 1	Basic banking licence permitting all foreign currency transactions with foreign companies and some foreign currency transactions with domestic companies	Rmb 100 million (US\$12 million)	Upon accession ^c
Level 2	Banking licence permitting foreign currency transactions with foreign and domestic companies and residents	Rmb 200 million (US\$24 million)	Upon accession ^c
Level 3	Banking licence permitting all foreign currency transactions with foreign companies, some foreign currency transactions with domestic companies, all domestic currency (<i>renminbi</i>) transactions with foreign companies and some domestic currency transactions with domestic companies	Rmb 200 million (US\$24 million)	Progressively by 2004 ^c
Level 4	Banking licence permitting all foreign currency transactions with foreign and domestic companies, all domestic currency transactions with foreign companies and some domestic currency transactions with domestic companies	Rmb 300 million (US\$36 million)	Progressively by 2004 ^c
Level 5	Banking licence permitting all foreign and domestic currency transactions with foreign and domestic companies	Rmb 400 million (US\$48 million)	Progressively By 2004 ^c
Level 6	Full banking licence permitting all foreign and domestic currency transactions with all foreign and domestic companies and residents	Rmb 600 million (US\$72 million)	Progressively By 2007 ^c

Notes: a This is only a broad summary of the capital requirements for foreign owned financial institution branches. For full details of the levels of banking licences and other requirements and restrictions, including exact timing of liberalisations, refer People's Bank of China, 2002 and World Trade Organization, 2001c.

b The rules governing wholly foreign owned banks, cooperative banks and full service financial institutions, as opposed to bank branches, are different again. For more details, refer People's Bank of China, 2002.

c There are no geographic restrictions on foreign currency transactions. However, geographic restrictions remain on other transactions until 2007.

d Other restrictions also remain. For example, all lending of local currency, *renminbi*, must be fully backed by *renminbi* deposits.

Sources: People's Bank of China, 2002; World Trade Organization, 2001c.

IMPLICATIONS FOR BUSINESS AND GOVERNMENT

CHINA, REFORMS AND THE WTO

Ongoing reforms and the shift to the private sector are maintaining China's strong economic growth and delivering real income gains to the population, bringing further falls in poverty and boosting commercial opportunities. WTO entry further cuts barriers to foreign trade and investment, continuing a quarter-century long reform process and further integrating China into the global economy. However, beyond the headlines, China's WTO commitments could make even more important contributions to its long term development, gradually improving the business and legal environment, levelling the playing field for private and foreign businesses and building the modern institutions China needs to continue developing.

Projections for the next five to ten years are for annual growth rates of around 7 per cent, roughly doubling the size of the Chinese economy by the start of the 2010s. This will boost Chinese per capita incomes by about 85 per cent, providing an expanding and increasingly affluent market for local and foreign business.

However, China faces major challenges in financial system reform, SOE restructuring and social welfare provision. If these challenges are not dealt with rapidly and effectively, China's growth outlook may be markedly less robust. Delays in thoroughly implementing China's WTO package also would slow needed restructuring and limit business and consumer access to international quality goods, services and technology, reducing economic growth and welfare improvements and undermining commercial outcomes. However, given China's past 25 years of successful reform and development, the Government is likely to meet these challenges. This will allow the economy to continue growing robustly, although perhaps less than its full potential.

IMPLICATIONS FOR BUSINESS

China's economic prospects have important implications for Australian business. Already, China is a major trading partner for Australia, based on strong complementarity between the two economies. Continued strong economic growth and improved access will further boost Australian trade and investment opportunities, particularly in sectors previously off limits to foreign business.

China's WTO entry will benefit Australian agribusiness and services sectors most, since China's commitments in these areas are most comprehensive and Australia has a generally strong competitive edge in these industries. However, minerals and energy trade will remain the mainstay of the commercial relationship for the foreseeable future, particularly given the increasing business collaboration between large Chinese firms and Australian resource suppliers. Export and investment

opportunities in higher value manufactured production and infrastructure services also will expand over the medium term, particularly given China's rising manufacturing competitiveness and ambitious infrastructure investment plans.

The gradual but steady improvement in China's business environment also will benefit Australian businesses. WTO should lock in and reinforce these encouraging trends, particularly by entrenching a sounder system of commercial law and more equal treatment of all businesses. However, these positive developments do not remove the need for thorough market research and realistic expectations of likely hurdles; China will remain a challenging and competitive market in which to do business for a considerable period of time.

IMPLICATIONS FOR GOVERNMENT

Commercial Implications

China already is a significant economic partner for Australia, as our third largest merchandise trading partner and a small though rapidly growing recipient and source of two way investment. This important relationship will continue to expand due to the close trade complementarity between the two economies.

The Australian Government is committed to boosting this important commercial relationship by negotiating a trade and investment framework agreement and continuing to develop and assist closer business links. Already, Australian Government Ministers and Departments have developed strong links with Chinese counterparts and business groups. The Australian Trade Commission, Austrade, also is building on its strong relationship with ongoing programs to promote business opportunities in key areas including education and the Olympics.

In addition, as large agricultural trading nations, Australia and China share strong common interests in promoting more liberal international agricultural markets. Hence, China shares many of the interests of the Cairns Group of agricultural exporting countries, which Australian chairs. Indeed, in September 2002, China submitted a comprehensive proposal to the WTO agriculture negotiations that included a number of positions on agricultural reform quite close to Cairns Group views. More generally, Australia and China support further global trade liberalisation under the aegis of the current WTO round of trade liberalisation negotiations, which would boost market access for both economies. China's deepening privatisation, reform and restructuring programs also provide increasing opportunities for Australian investors to participate; the Australian Government can assist business recognise and access sound opportunities.

Development Assistance Implications

Australia became the first western bilateral donor to China in 1981, adding an important element to bilateral relations. China's development challenges may not be immediately apparent from the stable and prosperous images that cities such as Beijing and Shanghai present. However, both within and beyond these seemingly modernised cities, lie poverty and considerable inequality of development which, if inadequately addressed, have the potential to disrupt China's political, social and economic stability and growth.

Despite these huge development needs, China is a relatively small partner for Australian development assistance. In 2002-03, China will receive Australian assistance of just over \$55 million, including \$40 million through the bilateral program and \$15 million through a range of Australian financed regional and multilateral channels. Bilateral assistance focuses on strengthening governance at central and local levels of government, building civil society and reducing poverty in selected rural areas, especially in western China.

Before joining the WTO, China's economic and corporate governance and policy needs already were immense. In the short term, WTO entry places significant additional pressures on key institutions to implement new commitments and formulate sound economic policies to sustain China's growth. Multilateral and bilateral donors, including Australia, are assisting Chinese central and local government officials, consumers, workers, farmers and businesses adjust to this challenge. Australia has many strengths which make it well suited to support Chinese Government efforts in these areas, including credible and professional economic policy institutions and high quality educational institutions.

One innovative and highly effective component of AusAID's current assistance program in China, which could provide a model for future economic governance assistance, is the Economic and Foreign Trade Training, EFTT, Project. This has included research reports, study visits and workshops, providing training and capacity building to assist implementing foreign trade liberalisation and WTO entry issues. This project also provided Australian based graduate programs in international economics for qualified middle level officers of the Chinese Ministry of Foreign Trade and Economic Cooperation, MOFTEC.

In total, over the past five years, the EFTT Project has trained more than 1 700 Chinese officials, including 48 officials who received Graduate Diplomas in International Economics from Adelaide University. This component of the Project received very positive feedback from local participants and their supervisors. Australia's good record in undertaking the EFTT Project places AusAID in a strong position to recommend similar activities to build economic and trade policy capacity in key Chinese Government institutions. Such activities are likely to form an important part of a new program of governance assistance, expected to commence in late 2003.

As part of its new governance program, AusAID similarly could consider offering training at various levels to key institutions. This could comprise in-Australia postgraduate programs and work attachments for promising middle level officials with appropriate educational background in areas such as economics, commercial law, competition, microeconomic reform, taxation policy and financial market supervision.

Augmenting this central middle management training function, the governance program also could include short term Australian based and in-country training for more senior Chinese officials from these key institutions, including training seminars and policy dialogues between Australian and Chinese counterpart officials. To build continuity of networks and strengthen institutional linkages, this training could be undertaken by the same university training middle level staff or at the host Australian institution.

Since 1998, training and technical assistance provided under the AusAID-administered China Capacity Building Program has helped establish contacts between Chinese institutions and their Australian

counterparts – for instance, between the two National Audit Offices. Further institutional links between key Australian and Chinese economic institutions could be developed through the new governance program. Potential partnerships include:

- the Reserve Bank of Australia and the Australian Prudential Regulatory Authority with the People's Bank of China (monetary policy and prudential supervision)
- the Australian Prudential Regulatory Authority with the China Insurance Regulatory Commission (prudential supervision of insurance companies)
- the Australian Securities and Investment Commission with the China Securities Regulatory Commission (stock market supervision)
- the Australian Department of Treasury with the Chinese Ministry of Finance (budget, taxation and fiscal policy)
- the Australian Competition and Consumer Commission with the State Development and Planning Commission (competition policy)
- the Australian Bureau of Statistics with the Chinese National Bureau of Statistics (statistical gathering and analysis)
- the Australian Attorney General's Department with the Chinese Ministry of Justice (legal and court reform)
- the Australian Customs Service with the Chinese General Administration of Customs (customs administration)
- the Department of Foreign Affairs and Trade with the Chinese Ministry of Foreign Trade and Economic Cooperation (international trade policy)
- the Australian Quarantine and Inspection Service with the Chinese Administration of Quality Supervision and Inspection and Quarantine (quarantine)

At lower administrative levels, WTO training also is important; many analysts suggest relevant local officials lack technical skills, presenting the greatest challenge to uniform implementation of WTO commitments. Australian development assistance could usefully be targeted at promoting the spread of training at these administrative levels. However, discussions with Chinese officials indicate it will be impossible to conduct face-to-face WTO training for all Chinese provincial officials in a timely way. Given its expertise in providing remote education and training services, Australia is well placed to provide Internet based training through Australian institutions. This experience plus its credibility as a training provider gives Australia a strong capacity in this area.

As many other donors provide WTO related training and other economic governance support, Australia's programs will need to complement rather than duplicate others and be implemented in close collaboration with multilateral organisations such as the World Bank and Asian Development Bank.

PROSPECTS

Over the next decade, China's continued robust growth, huge population and increasing openness are set to make it an even more important commercial partner for Australia. While significant challenges remain, WTO entry promises gradually to improve the business environment and ongoing reforms likely will overcome major structural challenges in the financial and welfare systems and the state enterprise sector. Australia has a strong interest in further developing this important relationship, by encouraging Australian exporters to access its growing markets and consider sound new business opportunities which China's restructuring and opening is generating, as well as by developing strong institutional links and training exchanges to assist China's development.

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