

CHINA'S ADMITTANCE TO THE WTO AND INDUSTRIAL STRUCTURAL ADJUSTMENT IN THE WORLD ECONOMY¹

The end of the long process of China's accession to the World Trade Organisation is in sight. How will entry into the WTO affect China's economy? The work reviewed in this paper shows that China will gain substantially from WTO accession. It will gain from the reforms that it has committed to as part of the accession process. It would gain far more from accession, which will give access to the commitments made by WTO members in the Uruguay Round. The value to China of reforming its services sector and restrictions on investment will also be significant. WTO accession also helps the Chinese government achieve domestic support for its reform agenda by tying domestic reforms to gains from liberalisation in the rest of the world.

WTO accession and liberalisation will have significant long-term effects on China's structure of production and on patterns of trade, and should speed industrial upgrading. China's liberalisation and structural adjustment can affect the economies it competes with in world markets, for example some of the ASEAN members. However, when liberalisation takes place in the context of a wider program of reform (in the WTO or in APEC), a greater number of sectors are involved and the gains are distributed more broadly.

Significant uncertainties remain – the most significant being whether other members will implement their Uruguay Round commitments on textiles and clothing. The accession agreements do not address the risk to China that other countries will resort to anti-dumping actions to protect their industries. The WTO processes also seem unable to deal with another increasingly important source of anxiety – the growth in preferential arrangements. Dealing with these issues requires further work in the WTO, and complementary action outside it. China's role as APEC chair in 2001 provides opportunities to complement its WTO accession with support for open regional cooperation.

Introduction

Lengthy negotiations have surrounded China's accession to the World Trade Organisation (WTO). New members are required to negotiate agreements with their major trading partners, which are then extended on a most-favoured-nation basis to the rest of the WTO's members. On 20 July the WTO's Working Party on China's accession will meet to review areas where agreement is yet to be reached, such as services, insurance in particular, and tariff-rate quotas.² Once the outstanding issues are resolved and the bilateral negotiations are

complete, then the Working Party Report, a Protocol of Accession and the market access schedules will make up the accession package. That package could be endorsed formally by the Working Party in September, which would give WTO members two months to ratify it before the next WTO Ministerial Conference in November. It is possible that China could join the WTO at the beginning of next year.

China has made a number of significant steps to meet the requirements for accession. These include establishing the legal basis for foreign trade, the deep reform of export and import systems, drastic tariff reductions and reform of the exchange rate system (Yang 2000). Song (2000) argues that China has made progress in key areas of trade liberalisation by reducing import barriers and not increasing export incentives, as well as replacing more costly with less costly instruments of protection. The bilateral negotiations have drawn further commitments for reform.³

Song (2000) explains why WTO entry will lead to a more open Chinese economy. Accession will bring a relaxation of constraints on conducting business in yuan, which will lead to a greater capacity to absorb foreign resources, including capital. Openness increases competition in the traded goods sector, improves resource utilisation and offers opportunities for economies of scale. These effects are behind the linkage between openness and growth. Song believes the linkage has been significant in China's case, estimating that exports have contributed 2 percentage points to the average real GDP growth of 10 per cent between 1990 and 1998.

Greater openness and export growth have brought structural change and shifts in China's trade mix. China's trade pattern has shifted to more closely match its factor endowments (Garnaut and Huang 2000). The share of agricultural-intensive and mineral-intensive products in exports has fallen rapidly since 1978, while the export share of labour-intensive manufactures has risen fast.

Despite the substantial progress to date on issues that are important to China's trading partners, other necessary reforms have encountered resistance. Resistance has reflected ideological barriers and pressure from vested interests in protected sectors, including the inefficient agricultural sector and areas dominated by state-owned enterprises (Drysdale 2000). The challenge is to manage the politics of reform. As Drysdale explains, the promotion of the benefits of reliable access to international markets will encourage support for reform in China. Security in terms of access to world markets is a key policy aim in China, and WTO accession is a critical part of that objective.

How significant will the effects of WTO accession be, and to what extent will it deliver the degree of security of market access that will support the reform program in China? This paper assesses the effects of market liberalisation on China's economy and on the world economy, as well as on production and trade in China and the rest of the world.

The paper examines the state of various aspects of China's trade and investment policy. It reviews recent quantitative assessments of the gains from accession to the WTO and notes some implications for domestic industrial adjustment. Particular attention is paid to the services sector, where impediments to trade and investment are argued to be large and where new empirical work is starting to reveal the extent of gains from reform. Some risks and uncertainties in the accession process are also noted.

While the focus of the paper is on structural adjustment in industry, and particularly the services sector, this does not mean that the Uruguay Round has not had significant effects on other areas. The implementation of intellectual property regimes and sanitary and phytosanitary (SPS) measures have led to significant institutional reform in many countries, demanding new bureaucratic skills and capacities. Many domestic practices have become subject to international standards. The same effects are likely in other countries that join the WTO.⁴

China's trade reform and industrial transformation

Policy features

Drysdale (2000) argues that China's trade and economic policies are already considerably more in line with WTO principles than when China first applied for membership in 1986. In 1988 China's unweighted average tariffs were 40.3 per cent, by 1993 they had fallen to 37.5 per cent, by 1996 to 23 per cent and to 17 per cent by October 1997 (Drysdale 2000). The average at the end of 2000 was 16.4 per cent. The bilateral negotiations with China have agreed commitments for further reform. The reports on China's agreement with the United States suggest that by 2005 industrial tariffs will be two-thirds of the 1997 level, while tariffs on agricultural products will fall by more than one-half.⁵ The bilateral agreement also indicates that the remaining quotas in place will be generally phased out by 2002 but no later than 2005, with progressive increases in quota volumes before then.

According to a report by the Pacific Economic Cooperation Council, China has significantly reduced non-tariff measures⁶ applying to goods since the 1980s (PECC 2000). On an unweighted basis, 23.2 per cent of all products were affected by non-tariff measures in the 1988–90 period. By 1993 the coverage ratio had fallen to 5.3 per cent. Many import licences and quantitative restrictions have been removed during the reform program, as Song (2000) points out. However, by 1996 the coverage ratio had risen to 7.3 per cent, during a period when only one other APEC economy increased non-tariff measures. The authors of the PECC report attribute this to a greater use of anti-dumping procedures. Disaggregated data show that most non-tariff measures were in the iron and steel and the transport equipment sectors.

China's foreign investment policy has also become more open (Yang 2000). A study by PECC's Trade Policy Forum (2000) indicates that restrictions on the rights of establishment have been substantially reduced. The rules on profit repatriation have also been eased. Other important aspects of foreign investment policy have not changed, including examination procedures, taxation rules, performance requirements, dispute settlement processes and work permit procedures. Policies in these areas are regarded as moderate impediments to foreign investment. Out of 18 APEC economies, China ranked third from the bottom in terms of openness to foreign direct investment.

The accession negotiations in relation to foreign investment in the goods sector have all been to do with trade. China has agreed to comply with the Trade Related Investment Measures (TRIMS) agreement and to eliminate requirements on local content and the transfer of technology by foreign firms.

China's services sector remains subject to a wide range of restrictions. New ways of estimating restrictions on services trade and investment (Findlay and Warren 2000) were used by Dee and Hanslow (2000a) to show that barriers in China's banking and telecommunications sectors are large. Both domestic and foreign firms face high barriers to entry and significant restrictions on their operations. The extent of these restrictions can be expressed in terms of a tax, either on output in the case of restrictions on operations or on the income lost from the restrictions on the entry of foreign capital. Domestic firms face a tax on output of 19 per cent because of barriers to their operations, and a tax of 124 per cent from lost income. Foreign firms face additional barriers because of greater discrimination in the domestic market. The tax on the output of foreign firms was estimated at 18 per cent, and the tax on income at 127 per cent. Of the countries examined by Dee and Hanslow, Indonesia exhibited the next highest set of margins, with a tax equivalent for the lost income from capital of 40 per cent.

In the goods sector, restrictions on foreign entry lead to higher domestic prices and larger domestic production. The protected sector would therefore account for a larger share of domestic output than if foreign firms were free to enter. Despite restrictions on foreign entry, China's services sector is relatively underdeveloped. The services sector only accounts for 33 per cent of output, which is low compared with other developing APEC economies.

A number of factors could be behind the underdevelopment of China's services sector. Barriers to entry create the scope to earn monopoly rents and raise the cost of services. Hoekman (1999) estimates that average gross operating margins are 50 per cent in China's services sectors, compared with 28 per cent for manufacturing. Restrictions on market entry not only create inefficiencies but also have the effect of reducing investment from all potential entrants, not just foreign suppliers.⁷

The accession negotiations have already identified a number of services sector issues. US Trade Representative Charlene Barshefsky (2000) asserts that China will open up at least a dozen areas. The text of the bilateral agreement with the United States refers to phasing-in periods of three to six years, to limits on the total number of new licenses issued, and to retaining caps on the extent of foreign equity allowed. Williams and Cass (2000) observe that major barriers will remain in many sectors, such as the requirement that foreign suppliers should operate through joint ventures with local firms. Williams and Cass also note, however, that China is offering a higher level of commitment than most other developing economies.

China has confirmed that WTO rules will apply to its state-owned enterprises (SOEs). As a result, the purchasing and sales decisions of SOEs are expected to be guided by commercial considerations. The terms of the agreement with the United States mean that subsidies to state-owned enterprises could trigger action under US laws on unfair trade practices. Although the state's role in the goods sectors has been considerably reduced (Drysedale 2000), there are still many issues about the way SOEs operate in the services sector. The GATS negotiations on market access to the services sector will place constraints on the activities of state firms.⁸

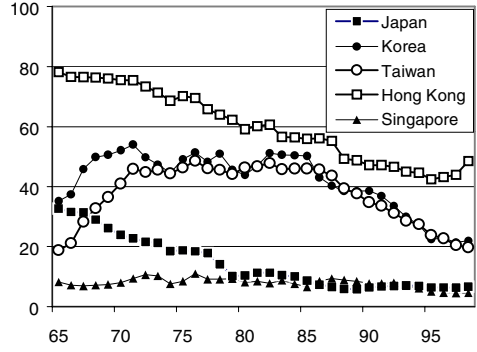
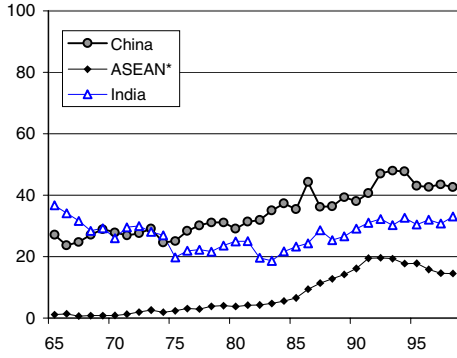
Reform and trade patterns

Reforms to China's economy over the past 20 years have succeeded in boosting trade and income and have improved its ability to compete in world markets.⁹

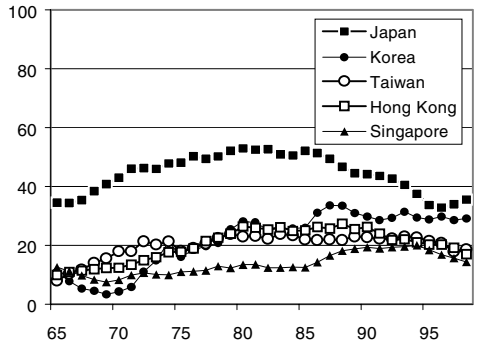
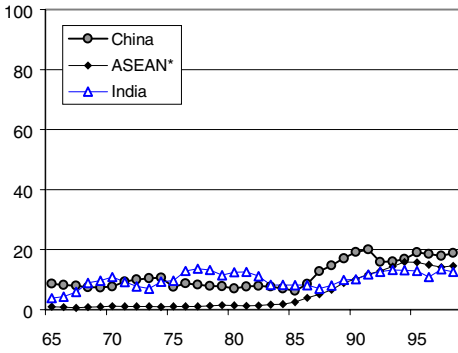
Figure 1 shows the importance of major commodity groups in the total exports of a sample of developing economies – China, India and the Association of South East Asian

Figure 1 Shares in total exports of selected commodity groups by economy (per cent)

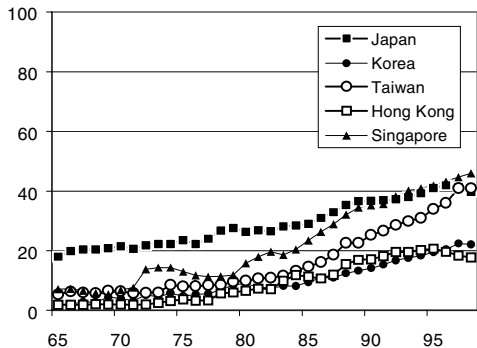
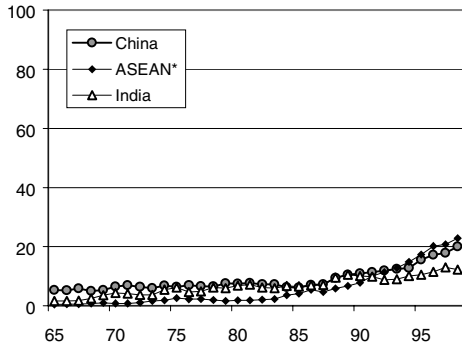
Labour-intensive products



Capital-intensive products



Technology-intensive products



Note: ASEAN member economies excluding Singapore.

Source: International Economic Data Bank, The Australian National University (compiled from UN Comtrade).

Nations (other than Singapore); and a sample of industrialising or industrialised economies – Hong Kong, Korea, Japan, Taiwan and Singapore.

As China's economic structure has changed, the share of labour-intensive products in its total exports has increased, although growth appears to have peaked in the mid-1990s, at a share of about 48 per cent. The share of capital-intensive products then started to rise, and more recently, technology-intensive products have become more significant.¹⁰ The proportion of labour-intensive products in the exports of industrialised and industrialising economies has been decreasing.

China's structural adjustment has generally followed the pattern exhibited in the industrialised economies. As Garnaut and Huang (2000) point out, however, China's economy has some special features that will affect the patterns of adjustment. First, it is such a big and diverse economy that it may take several decades of rapid growth for labour to become scarce and more expensive. Because of its regional diversity and its large investments in capital- and technology-intensive products, it could also 'emerge as an important supplier of more sophisticated products at a relatively early date' (Garnaut and Huang 2000: 19).

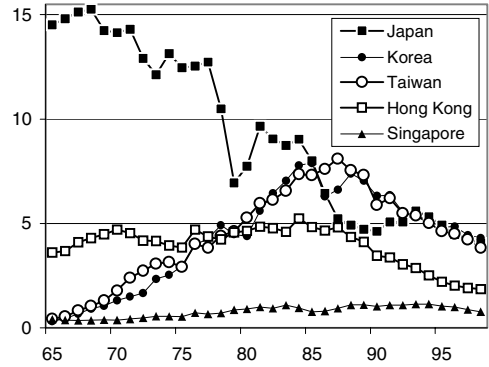
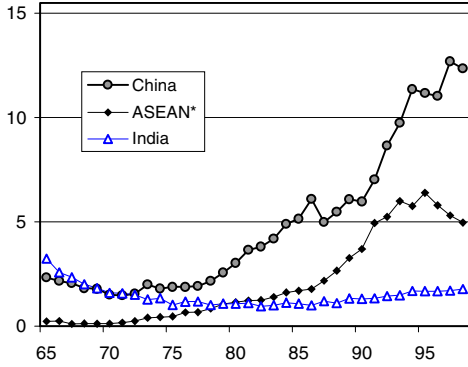
Figure 2 shows the shares of these economies in world exports of the same commodities, and suggests how world markets might change as China's trade grows further. The shares of China and ASEAN in world exports of labour-intensive products have been rising. East Asia's share of exports of labour-intensive products has not changed significantly since 1984, and the shares of Japan and the industrialising economies have been falling. A similar process of accommodating the newcomer suppliers of capital- and technology-intensive products has also been evident.

As Drysdale (2000) notes, China's share of labour-intensive products in world markets has risen at the same time as the proportion of capital- and, more recently, technology-intensive products in its exports. He argues that the former has supported the latter. China's export success has assisted changes in the structure of domestic production – a process that can be described as 'industrial upgrading'. Drysdale concludes that the openness is the best way of achieving industrial upgrading.

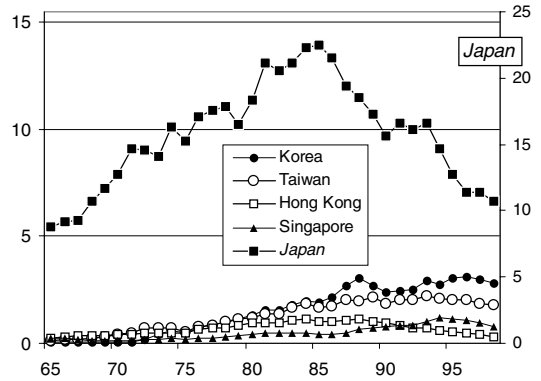
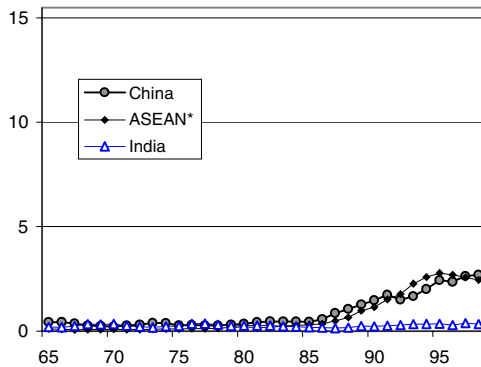
Despite restrictions on foreign direct investment, China's reforms have been associated with a rapid growth of capital inflows. Between 1982 and 1998, China utilised US\$407 billion of foreign capital, with FDI accounting for approximately two-thirds of the total. The rapid growth of foreign investment has been in response to China's attractiveness as an export base (Chen and Findlay 2000). The policy regime, while still restrictive, has become more liberal.

Figure 2 Shares of world exports of selected economies by commodity groups (per cent)

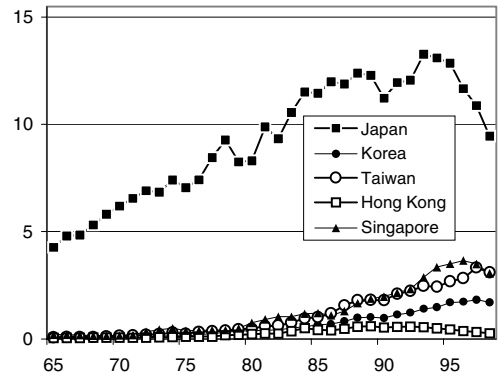
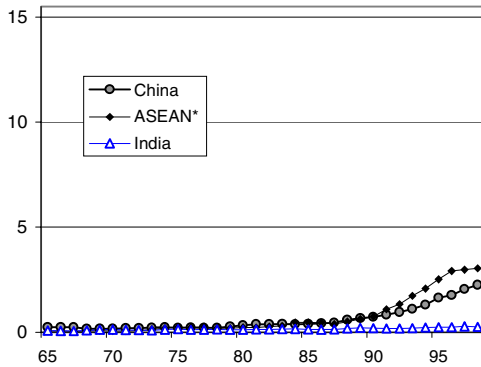
Labour-intensive products



Capital-intensive products



Technology-intensive products



Note: ASEAN member economies excluding Singapore.

Source: International Economic Data Bank, The Australian National University (compiled from UN Comtrade).

Impediments have been greater in some sectors than others, and probably less so in export-oriented activities. Investors have been attracted by the size of the domestic market and the relatively well-educated and low-cost labour force. Another factor has been the extensive business connections with overseas Chinese in Asia and around the world.

Chen and Findlay (2000) find that foreign firms are concentrated in labour-intensive industries, and are more biased toward labour-intensive industries than domestic firms in the same industry. In capital-intensive and technology-intensive activities, most FDI firms are in newer and faster growing industries, while domestic firms are focused on traditional capital-intensive and large-scale industries.

Chen and Findlay (2000) argue that the focus of FDI firms on labour-intensive production has pulled China's economy away from its emphasis on capital-intensive production, and therefore further toward its comparative advantage. The more recent investment by foreign firms in capital- and technology-intensive industries suggests that they will also help China's transition to the next stage of its industrial development.

Clearly foreign firms have been playing an important role in trade. In 1998 FDI firms accounted for nearly half of China's total trade, and produced most of China's manufactured exports. These are mainly assembled and processed goods that use many imported components. Sales have been increasing to the Chinese market, and FDI firms are expected to increase their market shares even further as a greater number of large multinationals invest in China. This will intensify competition between FDI firms and domestic firms.

Impacts of WTO entry

China's accession to the WTO will affect the economy not only through the reforms it is required to make, but also by increasing access to other markets. China's industrial structure and trade patterns can be expected to change further as a result.

An important aspect of China's accession to the WTO will be its access to the terms of the WTO Agreement on Textiles and Clothing (ATC). The ATC is a transitional arrangement for phasing out quotas agreed under the Multi-Fibre Agreement (MFA) over a 10-year period from January 1995. By 2005 textiles and clothing should be subject to the same treatment as other goods within the WTO framework. There are three phases involved and implementation is heavily weighted toward the end of the period.

Empirical work suggests the gains to China through WTO accession will be large because of its access to the ATC. Zhong and Yang (2000) use a GTAP model to show that

China's output of clothing and textiles, but especially clothing, will substantially increase if the MFA is completely phased out. This is despite the decline in China's terms of trade owing to the loss of quota rents. Zhong and Yang estimate the value of the removal of the MFA at US\$8.6 billion, which is approximately two-thirds of the benefits estimated from China's full access to the measures concluded in the Uruguay Round (US\$13 billion). China's clothing exports are estimated to increase by 142 per cent, production by 76 per cent and imports by 73 per cent (Zhong and Yang 2000, table 11.4).¹¹

These results assume that the ATC is implemented completely and China's treatment is the same as that of other countries. It is possible that countries could apply discriminatory safeguards to protect against an influx of Chinese exports (Zhong and Yang 2000). WTO rules allow the use of temporary quantitative restrictions to protect a domestic industry from serious injury.¹² The WTO also allows the use of anti-dumping procedures, which could unfairly discriminate against China if the calculation of its export prices do not consider its lower costs of production.¹³

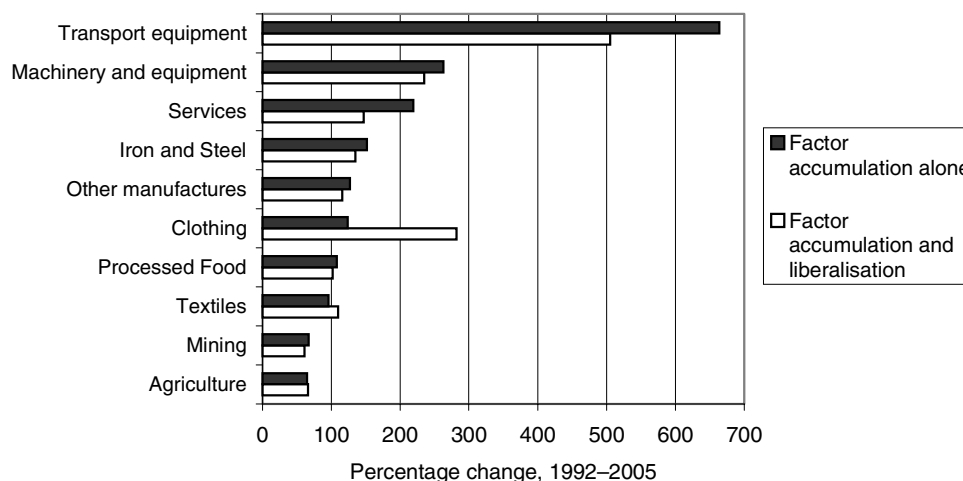
Zhong and Yang (2000) also look at the possible effects on output in China from its accession to the WTO. The full implementation of the Uruguay Round agreements and China's entry into the WTO could increase China's GDP by just over 200 per cent between 1992 and 2005, presuming that factor accumulation is also at work.¹⁴ Capital-intensive sectors grow the fastest (Figure 3). Trade liberalisation results in a particularly large increase in clothing output.

Bach et al. (2000) believe that China's gains simply from unilateral liberalisation (in terms of its second offer made to the WTO in 1994) will be significant. China's offer to reduce unweighted average tariffs from 40.1 per cent in 1992 to 18.5 per cent in 2005 has an estimated gain of US\$17 billion (measured in 1992 dollars), allowing for some tariff exemptions. The gain would be about US\$5 billion higher if China did not apply exemptions.

Unilateral liberalisation reduces the size of the highly protected textiles sector and expands the apparel sector, which gains access to lower-cost inputs. Even when the effects of the access to the Uruguay Round agreements are considered, the textiles sector continues to shrink because resources are drawn into apparel production.

The model shows that the welfare gains to China from unilateral liberalisation are larger than from liberalisation in the rest of the world. When China is given access to the benefits from the removal of the MFA, the gains from liberalisation in the rest of the world (without any action in China) are about the same as the benefit of unilateral liberalisation in

Figure 3 Effects of factor accumulation and trade liberalisation on growth by sector, 1992 to 2005



Source: Zhong and Yang (2000).

China. For most other countries, where the removal of the MFA is less significant, the effect of liberalisation in the rest of the world would not be expected to be as large as the gains from unilateral action.

Bach et al. also show how gains are generated in other regions from China's unilateral liberalisation encompassed in its 1994 offer (in the absence of Uruguay Round liberalisation). These are significant in industrialised and newly industrialising economies, including Hong Kong, the United States, Canada, Japan, the European Union, Korea and Taiwan. They observe that some developing economies (e.g., Indonesia, Malaysia and Thailand) would suffer 'relatively small' losses. These economies gain from market access to China, and from lower-priced imports, but face greater competition in export markets. When the Uruguay Round liberalisation, particularly the removal of the MFA, is considered all these economies gain substantially.¹⁵

Feng and Huang (2000) use a GTAP model to examine the sectoral impacts of various liberalisation scenarios. They find a contraction in China's agricultural sector of less than 1 per cent. While this change seems small, the absolute effects could be large because of the significance of farming in China, and therefore there could be significant structural adjustments to be made in agriculture.¹⁶

In contrast Drysdale (2000) points to the prediction of Lu (1996) that intra-industry trade in agricultural products and processed foods is likely to increase after liberalisation. Drysdale also points out that the models used to estimate the effects of trade liberalisation on output and trade often exaggerate adjustment costs since they do not fully capture the effects of shifts in intra-industry trade (Chen 1996).¹⁷

Until recently, foreign direct investment and the services sector were not well specified in these models.¹⁸ Dee and Hanslow (2000a, b) have used new estimates of impediments to trade and investment in services to improve these aspects of the modelling work. Their model distinguishes between firms according to location and ownership type. The addition of this sort of detail comes at the expense of sectoral coverage – the model is applied to only three sectors.

Estimates of the cost of impediments to trade in services tend to be higher for developing economies because barriers have a number of effects (Dee and Hanslow 2000a). Because many barriers apply equally to domestic and foreign firms, liberalisation of this sector not only means the removal of discrimination against foreigners, but it also facilitates domestic entry. Although liberalisation does advantage other sectors by reducing the cost of services, Dee and Hanslow (2000a) found the greatest cost benefits accrue to the services sector itself. Therefore the benefits of services trade liberalisation are likely to be concentrated in that sector.

Dee and Hanslow (2000a, b) found that barriers to services trade are particularly high in China, and therefore that liberalisation of the services sector is likely to bring a significant fall in prices and an expansion of output from all sectors, including the services sector.

Estimates of the welfare gains associated with services liberalisation are large. Dee and Hanslow (2000b) report that of the total worldwide gains from eliminating all post-Uruguay Round barriers, about 19 per cent are associated with agriculture, 31 per cent with manufacturing and 50 per cent with services. Over three-quarters of the global services gain in their model comes from the full liberalisation of China's services sector. These gains are associated not only with cross-border trade but also with the removal of restrictions on foreign investment.¹⁹

In Dee and Hanslow's model, some large industrialised economies lose from services sector liberalisation. This is because the measure of welfare gains is based on gains to national income, from whatever source (the home economy or the host economy of an offshore project). Services liberalisation leads to a relocation of capital, with consequent effects on income. It also reduces the economic rents available in services markets, and can make foreign investors

worse off. In this particular model, the scale of these effects is large because it is assumed that barriers to entry create rents rather than lead to higher costs (that is, that the tax equivalents are captured by firms operating in the protected markets).

A different specification would lead to a different set of welfare results. However, this experiment does highlight the possibility that rents will be captured by investors in protected markets, and that those investors will include foreigners. Liberalisation that reduces the size of those transfers can lead to substantial welfare effects in the host economy.

Risks in the assessment

Although WTO accession does provide a significant degree of support for the domestic reform program and is likely to benefit China's economy, there are significant uncertainties about whether these gains can be delivered.

First, the scale of the benefits to China hinge on whether other countries fully implement their Uruguay Round commitments, especially in textiles and clothing, and do not resort to using discretionary safeguards and anti-dumping procedures.

WTO members have been making greater use of anti-dumping procedures in recent years (James 2000). If China also decides to apply such procedures, as it is able to under WTO rules, this might eventually challenge attitudes to the use of this instrument, even within the United States, and lead to reform of the rules in the WTO (James 2000).

A further issue is that the sequencing of reform and the differences between the stages of reform across provinces and between levels of government adds to the chances that China will be drawn into trade quarrels about whether its domestic policy is consistent with its WTO commitments. A review of issues in US–China trade relations nominated transparency as the major barrier in bilateral trade:

China's trade laws and regulations are often secretly formulated, unpublished, unevenly enforced, and may vary across provinces, making it difficult for exporters to determine what rules and regulations apply to their products. In addition, foreign firms find it difficult to gain access to government trade rule-making agencies to appeal new trade rules and regulations. (Morrison 2001: 6)

Once accession occurs, these quarrels can be brought to the WTO's dispute settlement mechanism, which following the Uruguay Round has operated in a much more judicial

manner. A greater risk is that countries will decide to take unilateral action, as the United States did in the 'Special 301' cases.

Disputes could also arise if other WTO members believe that China, despite its commitments to the TRIMS agreement, was continuing to impose rules on foreign investors in terms of technology transfer, local content or export performance (Morrison 2001: 9).

The gains from trade liberalisation could also be put in doubt by the growth in preferential regional trading arrangements. There has been a boom in interest in bilateral preferential agreements in East Asia (Findlay 2001). The most recent examples, announced at the meetings of the Asia Pacific Economic Cooperation (APEC) forum in Brunei, are negotiations by Singapore with both Australia and the United States.

China would face the loss of trade from the negotiation of preferential arrangements. In textile and clothing markets, these arrangements could replace MFA quotas with new forms of discrimination. Zhong and Yang (2000) mention as examples the links between the European Union and Turkey and between the Central and Eastern European economies. Another example could be the Free Trade Area of the Americas (FTAA) agreement and the way it will affect access to North American markets. Any new preferential arrangement in East Asia that excludes China is likely to divert trade away from China. The same effects could be observed in markets for other, more capital-intensive products as China's share of those markets continues to grow. Preferential agreements will make it more difficult for China to attract investment into the most efficient stages of production for its industries in the value-adding chains. China will find it more difficult to make the transition from one market to another as its competitiveness shifts.

What constraint on these sorts of preferential agreements would WTO accession provide for China? The answer is – very little. With respect to trade in goods, the General Agreement on Tariffs and Trade contains an article that specifies the principles to be met in the design of these agreements. Although the WTO has processes to review the agreements that are notified to it, so far it has only been able to reach consensus on a few of the close to 200 agreements that it has been told about.²⁰

Given these continuing uncertainties, China could look to supplement its WTO strategies with regional initiatives, particularly those based on the principle of open regionalism.²¹ APEC is a complement to the WTO, not a substitute, and provides a useful vehicle for China's foreign economic diplomacy (Drysdale 2000). Its guiding principle is that liberalisation among its members takes place through concerted unilateral action in which

the policy changes of each member are open to all other members. Drysdale argues it is important for China to avoid the development of discriminatory subregional markets, as the asymmetry in China's relations with its neighbours 'has the potential to bedevil them' unless they are part of an open trading system in the region. In its year of chairing the APEC forum, China could take the opportunity to document its WTO accession commitments in its APEC Individual Action Plan. It could also look for commitments from others on implementing the ATC, in the context of APEC work on non-tariff measures (PECC 2000). As chair, China could also pursue the question of whether subregional agreements among APEC members are consistent with APEC principles. It could also back the WTO-related capacity-building programs that were stressed in the Brunei meetings of APEC, as these would be especially valuable to China.²²

Conclusion

How significant are the gains to China from WTO accession? China will gain substantially from the offers it has made, even if these reforms are only implemented unilaterally. It would gain much more from accession to the WTO and full access to commitments made in the Uruguay Round. The bulk of the benefits to China from liberalisation in the rest of the world come from the implementation of the ATC. If China has access to the terms of the ATC, the benefits to China from the implementation of Uruguay Round commitments in the rest of the world are estimated to be about the same as those from unilateral liberalisation.

The estimation of gains from China's accession are based on liberalisation in the goods sector. The modelling results reported in this paper point to the value of reforming the services sector and restrictions on investment. Models of full liberalisation (the removal of all impediments), show service sector reform to account for the bulk of the benefits, especially in China.

While the gains from unilateral reform are large, so are the gains from reform in the rest of the world. A reform program that links these gains is more likely to be successful in China. Accession to the WTO provides a mechanism for establishing that linkage.

China's capacity to sustain the reform program will be tested again once it joins the WTO. China has made substantial commitments to liberalisation, on schedules up to 2004 and 2005, but accession to the WTO will lead to another round of pressures for additional reform, through the built-in agenda and negotiations for a new round. China's response will

depend in part on its experience of access to the Uruguay Round programs of other trading partners, in particular the ATC. It will also depend on its treatment in the negotiations over the accession commitments. China could argue that it has made commitments further into the future than have many of its trading partners and that those commitments should be taken into account.

Foreign direct investment has already played a significant role in industrial transformation and will continue to do so as China's share in world markets for capital- and technology-intensive products increases. The WTO contains no specific provision for direct negotiations over investment policy, except for trade-related matters and investment in the services sector. Other aspects of China's foreign investment policy are likely to be put under increasing pressure from market forces, given the mobility of foreign investment.

WTO accession and liberalisation will have significant long-term effects on the structure of production and the patterns of trade. The trends are evident already, with reforms reinforcing the position of labour-intensive industries in output and trade. The importance of those products might have peaked and China could be on the verge of the next stage of its industrial development, involving a more rapid rise in the importance of capital- and technology-intensive products. This transition will be supported by China's participation in world markets for labour-intensive products.

China's liberalisation and structural adjustment can affect the economies it competes with in world markets, for example some of the ASEAN members. However, when liberalisation takes place in the context of a wider program of reform (in the WTO or in APEC), a greater number of sectors are involved and the gains are distributed more broadly.²³

WTO accession provides benefits to China in terms of securing access to world markets, and will drive trade and growth in China and in its trading partners. As a consequence of these effects, accession also supports the domestic reform process. Significant uncertainties remain, however, including the terms of the implementation of the Uruguay Round commitments on textiles and clothing. The accession agreements do not address the risk to China that other countries will resort to anti-dumping actions to protect their industries. The WTO processes also seem unable to deal with another increasingly important source of anxiety – the growth in preferential arrangements. Dealing with these issues requires further work in the WTO, and complementary action outside it. China's role as APEC chair provides opportunities to complement its WTO accession with support for open regional cooperation.

Notes

- 1 This paper draws heavily on chapters from a book on China's entry to the WTO (Drysdale and Song 2000), including chapters by many APSEM colleagues. Thanks to Peter Drysdale and Ligang Song for their comments on this paper. Thanks are also due to Mick Shadwick for discussion of services sector issues in China and to Chunlai Chen for help on foreign investment matters. PECC colleagues Ray Trewin, Robert Scollay and Sherry Stephenson worked on the data on tariffs and non-tariff measures referred to. Thanks to Jong-soon Kang for help with the IEDB data. This paper was originally presented at the China, Japan and Korea Joint Project Symposium on Cooperation among China, Japan and Korea from Mid- and Long-Term Perspectives, which was held in Tokyo on 6 December 2000. The paper was finalised while the author was visiting the Research Institute for Economics and Business Administration at Kobe University. Thanks are due to the two referees for their thoughtful comments. All errors are the author's.
- 2 In BRIDGES Weekly Trade News Digest (Vol. 5, No. 28, 24 July 2001) it was pointed out that:

[the] Working Party holds plurilateral talks focusing on the remaining unsettled issues; countries particularly concerned with the matter constitute each plurilateral group. During the 4 July China Working Party session, for instance, the various plurilateral groups drafted texts on: application of antidumping and countervailing measures; industrial policy, including subsidies; judicial review, uniform administration and transparency; the application of product-specific safeguards and textiles; quantitative import restrictions, including prohibitions and quotas; China's sanitary and phytosanitary measures; trade-related aspects of intellectual property rights; technical barriers to trade; trading rights; and a transitional review mechanism'.
- 3 The text of the bilateral agreement with the United States is available at <<http://www.uschina.org>>, and summaries of specific sections are available on <www.chinapntr.gov>.
- 4 For further discussion of these issues, see Williams and Cass (2000) and material available on the Web site of the ANU's China and the WTO Project at <<http://law.anu.edu.au/china-wto>>.
- 5 Quoted in Barshefsky (2000).
- 6 Non-tariff measures are defined here as 'core' measures according to the database compiled by the United Nations Conference on Trade and Development (UNCTAD). This includes quantity control, finance control and price control measures. The latter includes anti-dumping and countervailing measures.
- 7 Recording problems (e.g., a lack of data on the activities of small firms in rural areas) and the role of state-owned enterprises in the provision of services to staff are other possible factors behind the low share of services in output.

- 8 One of the sectors where greater competition is expected is the grain sector, where until recently distribution was dominated by state firms.
- 9 This topic is discussed in more detail by Garnaut and Huang (2000).
- 10 Some care needs to be taken classifying technology-intensive products. A country might export a product that is classified as technology intensive, but the final stage in the production process before export could be highly labour intensive.
- 11 The issue of the sequencing of the MFA reform and the costs of the delay in receiving the gains are not captured in this modelling work.
- 12 Details of the safeguard agreement for textiles negotiated with the United States are available from <http://www.chinapntr.gov>.
- 13 The United States and China agreed that the anti-dumping law that relates to non-market economies would apply to China for 15 years after accession. Chinese industries have the burden of proving that market conditions prevail. See <http://www.chinapntr.gov>.
- 14 Factor accumulation is assumed in the model used by Zhong and Yang. Details of the assumptions about the growth of labour supply and capital are reported in their table 11.3. China shows the most rapid capital accumulation over the period 1992 to 2005.
- 15 Gilbert and Wahl (2000) also conclude from their review of the studies in this field that although other countries will win or lose from China's reform, depending on whether they compete with China's exports or are suppliers of imports, 'the net welfare impacts are relatively small in either case'.
- 16 Even if the volume of labour released is only 1 per cent of the agricultural labour force of over 330 million, the number of people involved is significant. Policymakers are concerned that the costs of adjustment could be high in the poorer counties in western and central China.
- 17 Applying a partial equilibrium model of the agriculture sector in China to the effects of liberalisation, Huang and Chen (1999) find that China's imports of grain (especially corn) and China's exports of pork and poultry will increase. Other commentators expect a growth in exports of other labour-intensive crops, such as horticultural products.
- 18 Gilbert and Wahl (2000) provide a more complete survey of the modelling literature relating to trade liberalisation in China.
- 19 This simulation applies to full liberalisation in China, not just China's accession offers.
- 20 For further discussion of the problems of the GATT and General Agreement on Trade in Services (GATS) provisions on preferential arrangements, see Findlay (2000), Snape (1996), Laird (1999) and Crawford and Laird (2000).
- 21 Drysdale (2000) provides a more extensive discussion of APEC's value to China.
- 22 China's chief trade negotiator, Long Yongtu, in his remarks to the 13th Working Party meeting, stressed the progress China has made in developing laws and institutions to implement the accession commitments. He referred to 30 trade laws and regulations that have been amended, to the revision of the Patent Law, the

Trademark Law, the Copyright Law, to a number of laws related to foreign investment, and to the rules and regulations of various departments. As an example of the last of these items, a briefing from visitors to The Australian National University from China's Ministry of Agriculture in November this year illustrated the extent of change required in some of that ministry's work, including the quarantine service.

- 23 Feng and Huang (2000) report some simulations in which China and other APEC economies all cut tariffs. The results of this simulation suggest a wider spread of benefits within China and among China's trading partners than from China's unilateral action (Drysdale 2000).

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