China has made substantial commitments to liberalisation in the service sector. At the time of full implementation, these commitments are generally more extensive than those that any other group of economies made during the Uruguay Round. Even at the time of accession, China’s commitments are substantial. Commitments of this extent suggest there will be substantial gains to liberalisation in the service sector and the dynamic effects of services liberalisation, we expect, will be an important driver of growth in China.

The extent and impact of China’s service sector commitments are reviewed in this chapter. We outline the commitments made by China in the accession process and compare them to the GATS commitments by other countries. We illustrate some of these impacts by reference to particular sectors (although see other chapters for discussion of issues in the financial services sector).

We also comment on some of the key issues in the implementation of services sector commitments, including the capacity of local governments to meet the expectations created in the rest of the world by WTO accession, the problems of meeting domestic expectations of service obligations and the nature of the some of the key regulatory questions that might arise.

**IMPEDIMENTS AND COMMITMENTS**

China has made substantial commitments to liberalisation of the service sector in the accession process. Work comparing China’s commitments in terms of the structure of the GATS shows that China’s count coverage (the proportion of sectors and modes of supply in which commitments are made) is ‘much higher than any other
group of countries (including high income countries)' (Mattoo 2001). Mattoo reports a comparison of the extent of China’s commitments based on a representative sample of service sectors as defined in the GATS. The comparison includes all four modes of supply for these sectors (that is, cross-border supply, consumption abroad, commercial presence, and the presence of natural persons).

The comparison of commitments includes consideration of commitments on market access and on national treatment. Market access in the GATS is defined in terms of types of policy which are prohibited, and by illustration of a number of limitations—on the number of suppliers, on the value of service transactions or assets, the number of operations or the quantity of output, the number of people that can be employed, and measures which restrict the type of legal entity which might be used to supply the service. These are measures affecting access to the market by both domestic and foreign suppliers. There is also reference under the market access provision to limitation of participation of foreign capital. The national treatment provision requires that Members accord suppliers of other Members treatment no less favourable than that accorded to its ‘own like services and service suppliers’ (Article XVII). Commitments only apply in sectors which are scheduled in the GATS commitments and in any such sector Members can record limitations on either market access or national treatment in each mode of supply.

China at the time of accession has made at least partial market access commitments of some kind in nearly all sectors sampled in the work reported by Mattoo for all modes (although less so for cross border supply). But if focus is the point in time when all the commitments are implemented (seven years after accession) then the extent of China’s commitments is ‘much higher than the commitments offered in the Uruguay Round by any other group of countries (including high income countries)’. The extent of commitments to full liberalisation was also higher than that of any other group of developing economies.

A further important component of China’s commitments is the provision in its commitments of full national treatment. These are also wider (covering more sectors) and deeper (higher level of commitments to openness, that is, fewer limitations recorded) than those of all other country groups. For further detail of China’s sectoral commitments in relation to commercial establishment in the services sector, and the treatment of foreign suppliers, see Chapter 9 in this volume.

Mattoo reviews the nature of the restrictions that do remain. He observes that China has adopted the standard commitments on the movement of natural persons,
that is, entry is only guaranteed for managers or specialists (either intra-corporate transfers or people employed by foreign invested enterprises) or services salespersons on business visits. There is no commitment to other types of movement of natural persons, such as unskilled labour or movement of people which is not linked to a commercial presence.

With respect to commercial presence, Mattoo notes that restrictions imposed include rules on the form of establishment, on geographic scope, and on business scope. There might also be other regulatory requirements, such as a rule requiring a foreign establishment to have a certain amount of assets.

**IMPACT**

It is possible in the processes of the GATS that commitments made in international negotiation may have a relatively small impact, since as a result of the negotiating process, economies may be binding but not changing the current state of policy. This is not to deny that the process of binding has substantial value, including the reduction of risks of future policy changes, and the greater confidence among foreign entrants in the openness of the policy regime.

There is however a limited amount of evidence of the overall pattern of impediments in the service sector in China, which might be used to assess the extent of liberalisation implied by the difference between current policy and the commitments. There is some evidence from the telecommunications sector that China has been an outlier in terms of the high level of impediment (Warren 2000).

Building on joint work by the ANU and the Productivity Commission (Findlay and Warren 2000), and in preparation of a data base for modelling work, Dee and Hanslow (2000a) divided impediments into two types, those affecting establishing and those affecting the operations of services firms. They also identified impediments which applied to all firms and those which only applied to foreign firms. Both domestic and foreign firms in China were estimated to face high barriers to entry and significant restrictions on 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 income from capital in the case of restrictions on entry. Their assessment is that for the services sector as a whole, domestic firms face a tax on output of 19 per cent, which is equivalent to the restrictions on operations, and a tax of 124 per cent on income from capital to reflect limits on rights of establishment. Foreign firms faced additional barriers, as evident in margins of discrimination equivalent to an
18 percentage point tax on output, due to restrictions on operations, and a 127 percentage point tax on income from capital, reflecting restrictions on establishment. The next highest set of margins is that for Indonesia, for example, a 40 percentage point tax on income from capital to reflect restrictions on establishment.

The size of the welfare gains associated with services liberalisation are large (Dee and Hanslow 2000b). They report that out of 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. Of the global services gain in their model, just over three quarters is associated with the full liberalisation of the service sector in China. They stress that these gains are associated with the liberalisation of the FDI mode of supply of services as well as cross border trade, and not just the latter. This simulation applies to full liberalisation in China, not just China's accession offers.

Liberalisation commitments in services contribute direct gains to China, as noted above in terms of the modelling results, but a more open services sector also complements reform in other sectors. Access to cheaper intermediate services reduces the biases against other export-oriented sectors and facilitates the participation of other sectors in world markets.

The service sectors themselves are often noted for the intensity with which they use other sectors. Service sector commitments can therefore have significant effects in terms of the international orientation of the whole sector. For example, lower cost telecommunications services reduce the bias against the provision of some labour-intensive services (data entry for instance) in the cross border supply mode. An efficient transport and telecommunications system is a key element in the growth of the tourism sector in China. Dee and Hanslow (2000a) also show that the greatest unit cost impost from services trade barriers actually falls on the services sector itself. Therefore the benefits of services trade liberalisation are likely to be concentrated in that sector.

Services sector barriers inhibit entry and reduce supply, creating the scope to earn rents in this sector. An indication of the extent of this effect is available from Hoekman (1999) who reports estimates of average gross operating margins of 50 per cent for all services in China on average, compared to 28 per cent for manufacturing.

Dee and Hanslow report that, in the particular experiment they design, some large industrial economies actually lose from services liberalisation. They explain this result by pointing out that their welfare measure is based on national income, from
whatever source (the home economy or the host economy of an offshore project). Services liberalisation leads to a relocation of the capital stock with consequent effects on income. It also affects the rents available in services markets. When liberalisation reduces those rents, then foreign investors can be made worse off. In this particular experiment the scale of these effects is large, because it is assumed that the effects of the barriers to create rents rather than lead to higher costs (that is, 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 impact of protection on rents in this sector, the possibility that those rents will be captured by investors operating in these protected markets, and that those investors will include foreigners. Liberalisation which reduces the size of those transfers can lead to substantial welfare effects in the host economy. This consideration is important in the design of policy in China and the value of completing the transition to full implementation of services commitments.

Further evidence of the impact of reform can be illustrated from work in progress in particular sectors. Luo and Findlay (2001) have examined the extent of commitments in the group of activities that make up the logistics sector. They find that a more open market for logistics services in China which transfers the technology for the redesign and management of integrated services is likely to have significant effects on total logistics costs in China. The savings are associated not so much with the fall in the costs of transport (which has already experienced domestic deregulation) but to the application of systems which reduce the costs of warehousing, storage and damage to goods. They estimate that the savings could amount to as much as 10 per cent of the wholesale price of manufactured goods in China. The effect could be even larger for fresh food where the importance of logistics costs in prices at wholesale level is even higher.

In the logistics sectors, there is evidence already of substantial foreign presence in anticipation of further opening up of the market. Most of the major global players have some form of operation in China. In telecommunications, there is a different story. Foreign investors are likely to review and assess China’s policy in this sector carefully. The caps on the extent on foreign ownership and the geographic limitations on foreign activities may not be the main problem. A major issue at this stage is reported to be the lack of specificity on the regulations for foreign investors in the sector. Meanwhile, foreign investment will be more likely concentrated at the high end or some special segment of basic telecom and value-added services, and as
strategic partners, or in alliance with existing operators. Therefore it is unlikely that competition will flourish just because of WTO accession. Furthermore, there is no requirement that the licensing procedure currently used will need to be eliminated. Foreign entrants and their new ventures will still need to go through the licensing procedure, which will remain at the discretion of the government agencies.

Another issue related to entry into the markets is the dominance of the two market leaders, despite the recent mandates to provide entrants with access to leased lines. In fact, it is because this access was so expensive in the past that a number of other organisations developed their own internal networks for communication purposes. This includes the PLA, which developed Great Wall Communications ultimately transferred over to Unicom, and the Ministry of Rail, whose Railcom has recently become operational and begun offering services to the general public.

In addition to these, the State Power Commission, and other state ministries also have built their own internal networks throughout the decades and are eager to obtain licenses to enter the lucrative telecom service market. Many of these organisations realised that once the market does open up to foreign investment, they would be prime targets for capital injections that would facilitate their restructuring and reform processes, and create substantial potential for gains in the future if they were to become a viable network supporting telecom services.

In the goods sector, restrictions on foreign entry would lead to higher domestic prices and larger domestic production. The protected sector would then account for a larger share of domestic output. But despite these restrictions on foreign entry, the service sector in China appears to be relatively underdeveloped. China's services share of output is only 33 per cent, which is low compared to the standards of other developing APEC economies.¹

A number of factors could contribute to the observation of a low services share of output. Services are delivered through the presence of the producer, so discrimination against foreigners also has the effect of reducing investment in the service sector in the economy applying that policy. Furthermore, there are also significant impediments which apply to all potential entrants into the services markets, not just foreign suppliers.

China has confirmed that WTO rules apply to SOEs. As a result, decisions by those enterprises on purchasing and sales are expected to be guided by commercial considerations. In the agreement with the United States, subsidies to an industry sector which are received predominantly by SOEs could trigger action
under US unfair trade laws. While considerable progress has been made dealing with reform issues associated with the SOEs in goods production (Drysdale 2000), there remain many SOEs operation in the service sector. The services negotiations on market access will add to the competitive constraints on those firms.

The impact of reform in the service sector also generates extensive real gains. This is because the impacts on real incomes are greater than those of the removal of a tax, for example, the impact of which includes transfer effects. When logistics costs, for example, are reduced resources are saved (the rectangle effects are gains, not just transfers, see Deardorff 2001).

Services reform can also contribute to a wider distribution of the effects of and gains from liberalisation. In the logistics sector, for example, a more efficient transport system creates a more integrated domestic market, and reduces the costs of trading in to the world market. The consequence is that, as full implementation is reached, the degree of openness is increased across the whole of China. The distribution of the gains from liberalisation is also widened. However, this effect is not universal. Issues remain concerning access to telecommunications services which we discuss below.

LESS-DEVELOPED REGIONS AND LIBERALISATION

Luo and Findlay (2001) point out that logistics efficiency is vital to the development of the less-developed regions. Reducing the costs of doing business between the so-called poor areas and the outside areas (both the relatively developed coastal areas and overseas) will promote trade. It will also promote investment projects in the poor areas, either for manufacturing or resource exploitation.

People living in poor areas can benefit from a more efficient logistics sector in a number of ways. First their terms of trade will improve. The costs of items they buy from the rest of China will be less. The prices they receive for the items they export to the rest of China will be higher. Work in other developing economies suggests the orders of magnitude of these effects can be high (Limao and Venables 2001).

The opening up of markets due to improvements in transport and logistics services can also have effects on competition in the local markets. Competition has a number of effects.

One is the impact on the rents available. Suppliers who previously had monopoly power are constrained by the options of supply from outside the region. Thus regulatory reform not only lowers costs but its competitive effects forces the pass.
ing on of those cost reductions to consumers in business and in households. Firms which previously earned rents from their protected position are clearly worse off but overall the region will show a welfare gain from the introduction of competition. In term of the welfare of the group of people living in the poor area, this effect is even larger when those who captured the rents were not local firms.

Another effect of competition, and a greater ‘foreign’ (both out of the country and out of the region) presence in all markets within a poor area, could be a dynamic one, for example, on the transfer of technology and productivity growth. This effect is likely to be greater in those services markets where an establishment is required to deliver the activity, and where therefore there is more interaction between the new supplier and local firms.

These are the kinds of dynamic effects which, in addition to the real income gains available immediately from reform, will be important drivers of growth in China. Furthermore, the development of a more efficient set of services which link the now isolated and underdeveloped areas with other markets inside and outside China is essentially providing an alternative to more extensive relocation of people from those areas that might otherwise be required.

**ISSUES IN IMPLEMENTATION**

There are some issues in the nature of the commitments and their application in China. As noted above, a number of types of restrictions are evident in China’s commitments. One is the restriction on the form of entity used in commercial presence, particularly in terms of the requirements to use joint ventures, and the timing of permission to establish completely foreign owned enterprises.

These arrangements for a transition impose costs on China. They delay the benefits of reform. Some motivations for this approach could include an attempt to capture some of the rents created in the transition to full openness, to slow down the transition and therefore (it is hoped) reducing the costs of adjustment (the consequence may be to delay those costs and add to the risks of backsliding) or simply to limit for a longer time foreign ownership in sectors about which there is domestic political sensitivity related to foreign participation.

The commitments also restrain in some cases the geographic distribution of entry (in professional services, telecommunications, and insurance for example). These generally restrict foreign entry to areas already relatively well developed. The motivation is presumably to provide a longer transition to local firms which it is
judged are less able to face foreign competition. However the cost to consumers could be substantial and as Mattoo points out the policy could make worse existing regional inequalities. Mattoo is also concerned that some regions will not have the chance to develop as a regional hub since the sequencing of openness combined with the agglomeration effects important in some service activities might lead to particular irreversible decisions on location of operations.

Another issue is the difference between policy at national level and that at local level. There is some evidence that while commitments to openness are made at national level, a number of aspects of local administrative processes can be used to retain discrimination against foreign (including those from other parts of China) suppliers.

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 more trade quarrels on the grounds that the application of policy was not consistent with China’s WTO commitments. Once accession occurs, then these quarrels could be resolved in the WTO dispute settlement system, which following the Uruguay Round operates in a much more judicial manner. Worse, these quarrels could be the subject of bilateral actions, such as the US ‘Special 301’ cases. A review of issues in US–China trade highlights the significance of these issues. The author nominated this question as a ‘major barrier’, which was described in the following way:

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).

Clearly there is some value in considering strategy for developing processes to transit the commitments made at national level to local government levels.

Another issue is the importance of the design of policy on universal service obligations. Some areas may remain beyond the reach of the foreign suppliers—areas not well served by physical infrastructure will not gain from world class logistics services in fresh food markets. Similar issues arise in the telecommunications sector. There is value in attention to the design of policy on service obligations in these areas. Experiences in the rest of the world will be valuable, and this work could be another focus in capacity building programs. These issues are especially
important in China with respect, for example, to road and rail transport and also access to the telecommunications system.

Box 8.1 includes material on the current situation with respect to this issue in telecommunications.

There has been discussion of a plan to set up a universal service fund that will be used for developing the western and rural regions that currently lag far behind its eastern coastal counterparts. However, it remains unclear who and how contributions to the fund will be made, and how they will in turn be disbursed.

In a recent presentation, Gruen (2001) has raised a number of questions and options for consideration of the management of these obligations. Gruen highlights the value of reconsidering the popular approach to a service obligation policy. Common is the use of cross-subsidies between consumer groups applied to provide specific services (for example, a rail link) to all residents in a particular area. An alternative is to provide services to well-defined target households so that the recipients have options for the manner in which they receive that support. Recipients might even be able to ‘cash out’ for example, or at least substitute between types of services. Gruen also discusses the value of broadening the funding base for service obligation policies, such as raising revenue in the general tax base. A further issue is introduction a competitive process that will generate new ideas about exploit-

**BOX 8.1**

**UNIVERSAL SERVICE OBLIGATIONS IN TELECOMMUNICATIONS**

Officially, the current rate of fixed-line phone ownership for China on average is still barely over 20 per cent of the population, while only 10 per cent of the population has access to mobile phones. However, some indicators point towards a much lower rate of teledensity in rural areas at around 6 per cent. The relevant authorities so far have not given any explicit universal service mandate to either of the two telecom companies who are the market leaders in China. They are more concerned at this point with creating a globally competitive industry than with providing universal service. Their aim, apparently, is to popularise the services through significant reductions for both calling and connection fees, as well as by eliminating installation costs altogether.

Yet, there remain large areas of the country in which the basic infrastructure for telecommunication connectivity still do not exist. In many remote areas out west, telephone poles have been set up along side roads, but remain unconnected. At the same time, mobile stations are limited to serving only the large cities. And while Internet can be very reasonably priced in the cities (averaging about RMB4 per hour in internet cafes in western cities) illiteracy remains the chief obstacle to their uptake in many of the western regions where Chinese is still the second language. There has been discussion of a plan to set up a universal service fund that will be used for developing the western and rural regions that currently lag far behind its eastern coastal counterparts. However, it remains unclear who and how contributions to the fund will be made, and how they will in turn be disbursed.
ing technological change to provide services or bundles of services at lower cost.

Finally, the capacity to implement new domestic regulatory arrangements consistent with the goals of the liberalisation program is another important question. Again, the experience in the rest of the world in the design of access regimes will be valuable. An important reference point will be the set of principles specified in the WTO's Telecommunications Reference Paper which refer to prevention of anti-competitive practices, the terms on interconnectivity, the right to develop a universal service policy, processes for managing licensing and the allocation of scarce resources like frequencies. The principles also refer to the importance of having a regulatory body which is independent of any supplier of basic telecommunications services. Mattoo points out that China has accepted these principles for telecommunications and, of most note so far, is establishing an independent regulatory body. He also argues that similar approach should be taken with respect to energy services and transport infrastructure.

CONCLUSION

China stands to reap substantial gains from services reform. The implementation of liberalisation will also have significant intersectoral effects, given the intensity with which other goods and services sectors consume services as an intermediate input. As these effects emerge, the services liberalisation is making an important indirect contribution to the liberalisation program. It does so by removing impediments to growth in new areas of specialisation and providing options for employment of resources displaced from other sectors in the adjustments that occur during implementation in all sectors of WTO commitments. The services commitments also have important implications for removing impediments to the integration of people now located in relatively poor areas in the domestic and the international markets. Access to markets which services liberalisation supports is a critical driver of development.

China's commitments on services are extensive and there is some evidence that policy is shifting from a relatively high starting level of impediments. The reforms will have both immediate effects on prices and the distribution of gains between producers and consumers, but also services reform stands to generate important longer term dynamic effects. The result will be an important contribution to the drivers of growth in China.

However, there are substantial issues in implementation. We illustrated some of
the difficulties of moving from a high-level impediments to more open markets by reference to the telecommunications sector. The impact of reform, on the other hand, appears to be more predictable in the logistics sector. While in principle reform in the services sector will generate significant real income effects and make contributions to growth through the sorts of dynamic impacts noted above, there are also likely to be significant differences in the rate and effectiveness of the implementation of the commitments between sectors. Disappointed expectations among foreign suppliers will lead to further discussion or even dispute with China over the implementation process.

These are not the only concerns about implementation of the commitments. Some additional implementation issues include the resistance to change that might be found at local government level, the operation of policy with respect to meeting universal service obligations, and the design of the necessary institutions for domestic regulation. With respect to the institutional development required to respond to these issues, there are clearly valuable inclusions in the development of any capacity building programs designed to facilitate the implementation process in China.

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Notes
1 The low share could also be due to recording problems, for example, the lack of access to data on the activities of small firms in rural areas, and to the role of state owned enterprises in the provision of services to staff.
2 There are also important issues in the application in some cases of grandfather provisions. See the chapter on insurance by Ken Waller in this volume.
3 Available at http://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm