CHINA'S ACCESSION TO THE WTO: THE SERVICES DIMENSION

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Abstract: China's GATS commitments represent the most radical services reform program negotiated in the WTO. China has promised to eliminate over the next few years most restrictions on foreign entry and ownership, as well as most forms of discrimination against foreign firms. These changes are in themselves desirable. However, realizing the gains from, and perhaps even the sustainability of, liberalization will require the implementation of complementary regulatory reform and the appropriate sequencing of reforms. Three issues, in particular, merit attention:

- Initial restrictions on the geographical scope of services liberalization could encourage the further agglomeration of economic activity in certain regions – to an extent that is unlikely to be reversed completely by subsequent country-wide liberalization.
- Restrictions on foreign ownership (temporary in most sectors but more durable in telecommunications and life insurance) may dampen the incentives of foreign investors to improve firm performance.
- Improved prudential regulation and measures to deal with the large burden of non-performing loan on state banks are necessary to deliver the benefits of liberalization in financial services; and in basic telecommunications and other network-based services, meaningful liberalization will be difficult to achieve without strengthened pro-competitive regulation.

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The fulfillment of China's accession commitments will lead to one of the most dramatic episodes of liberalization in services. Over the space of some six years, one of the most closed services markets has promised to become one of the most open. This paper begins by describing the policy commitments and then asks whether the implied disciplines are desirable. This leads to the main policy question: how is the process of transition best managed?

There is good reason to believe that the reforms will lead to significant improvements in the services markets themselves, in terms of prices, quality, product variety and the availability of new products. Our ability to quantify these benefits, however, is still limited. One problem is that the restrictive measures themselves, mostly barriers to foreign direct investment, are not easy to measure. For instance, how restrictive is the requirement to enter through a joint venture with minority foreign ownership compared to a quota on the number of providers? Another problem is that the result of restrictions on a particular mode of delivery depend on the degree of substitutability between modes, which varies across services sectors, is changing with technology and is also not easy to measure. For instance, the impact of the numerous restrictions on establishing a legal firm depends on the extent to which cross-border delivery (a completely unrestricted mode) is feasible for specific types of legal service.

Apart from the impact of liberalization on services markets themselves, two questions are of particular interest. First, how will the liberalization of services markets affect the integration of the Chinese economy, internally and with the rest of the world? For instance, will the improvement in telecommunications and transport services encourage the diffusion of economic activity away from the costal enclaves? Second, how will the poor be affected - in the product market, as efficiency increases but cross-subsidization ends, and in factor markets, as the scale of activity expands but surplus labor is shed?

The answer to many of these questions will depend on how the transition to more open markets is managed. We know the policy status quo and the destination as specified in the commitments, but need first to identify how much discretion China retains in its choice of policy. In fact, China's schedule of commitments specifies not only the terminal situation, but also how many of the modifications of policy will be phased in. Even though changes in the degree of competition and the pattern of ownership are largely pre-specified, they can be accelerated – GATS commitments do not prevent a country from liberalizing faster than it has said it would. More importantly, there are still large degrees of freedom with respect to the nature of domestic regulation. Three questions arise. First, are the transitional commitments, for instance with regard to gradual increase in foreign ownership and gradual elimination of geographical restrictions, optimal? Second, what are the regulatory priorities in each sector? And third, how are the main elements of the reforms, i.e. the changes in competition, ownership and regulation, best sequenced?

Section I describes China's accession commitments and Section II examines whether the implied loss of policy discretion is desirable. Section III identifies the priorities for regulatory reform, and Section IV discusses some of the issues relevant to the sequencing of reform.

I. CHINA'S ACCESSION COMMITMENTS

I.1 The GATS framework and services liberalization

The GATS covers all measures taken by Members affecting trade in services and all service sectors.[1] The Agreement is unusual in taking a wide view of what constitutes trade, and defines trade in services as the supply of a service through any of four modes: mode one, *cross-border supply,* is analogous to trade in goods, and arises when a service crosses a national frontier, e.g. the purchase of software or insurance by a consumer from a supplier located abroad; mode two, *consumption abroad*, arises when the consumer travels to the territory of service supplier, e.g. to purchase tourism, education or health services; mode three, *commercial presence* involves foreign direct investment, e.g. when a foreign bank or telecommunications firm establishes a branch or subsidiary in the

[1]The only explicit sectoral exclusion from GATS is certain "hard" rights in the aviation sector.

territory of a country; mode four, *movement of individuals,* occurs when independent service providers or employees of a multinational firm temporarily move to another country.

Certain GATS obligations apply across-the-board, while others depend on the sector-specific commitments assumed by individual Members. The most important of the general obligations are *transparency* and the *most-favoured-nation* (MFN) principle. The transparency obligation requires *inter alia* that each Member publish promptly "all relevant measures of general application" (that is, measures other than those which involve only individual service suppliers) affecting trade in services. The MFN obligation prevents Members from discriminating among their trading partners. The Agreement, however, permits Members to list temporary exemptions to MFN.

The liberalizing content of the GATS depends on the extent and nature of sector-specific commitments assumed by individual Members. The core provisions of the GATS in this context relate to *market access* (Article XVI) and *national treatment* (Article XVII). These provisions apply only to sectors explicitly included by a Member in its schedule of commitments and there too are subject to the limitations that a Member has scheduled. GATS commitments are guarantees, and the absence of such guarantees need not mean that access to a particular market is denied.

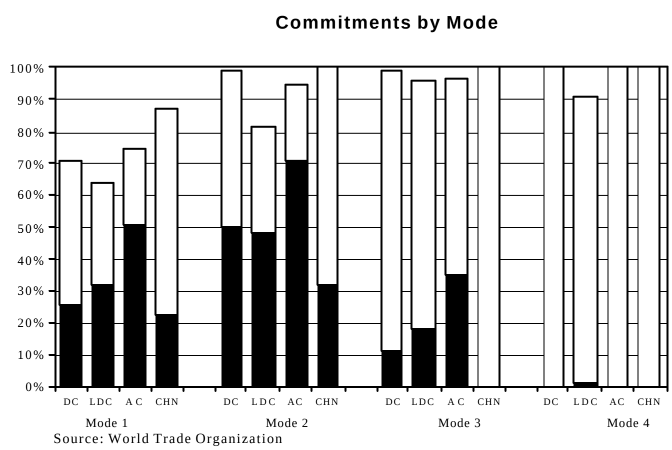
The *market access* provision prohibits six types of limitations, unless they have been inscribed by a Member in its schedule. These are: (a) limitations on the number of suppliers; (b) limitations on the total value of service transactions or assets; (c) limitations on the total number of service operations or on the total quantity of service output; (d) limitations on the total number of natural persons that may be employed; (e) measures which restrict or require specific types of legal entity or joint venture; and (f) limitations on the participation of foreign capital. In scheduled sectors, the existence of any of these limitations has to be indicated with respect to each of the four modes of supply described above.

National treatment is defined under Article XVII in the traditional GATT manner, as treatment no less favorable than that accorded to like domestic services or service suppliers. In contrast to the GATT approach, however, Members may inscribe limitations on national treatment in their schedules - with respect to each of the four modes of supply, as in the case of the market access provision.

1.2 Numerical overview of commitments: How different is China?

This section compares China's services commitments to those of other WTO Members. We proceed in two steps. First, we take a quick look at the state of access today, before China's liberalization commitments have been phased in, for a representative sample of sectors. Figure 1 compares China's commitments for each mode with those of developed, developing and acceding countries. On consumption abroad (mode 2), commercial presence (mode 3) and the presence of natural persons (mode 4), China has made at least partial commitments in all the sectors, and on cross-border supply (mode 1) for over 80 per cent of the sectors. This compares favorably with the commitments of all other country groups. However, the number of sectors with a guarantee of full access in China's schedule today are less than those for the other country groups, with a particularly significant difference on mode 3.

Figure 1



Note:
Calculated on the basis of a sample of 37 sectors deemed representative for various services sectors. See Annex Table 1 for details on China and WTO Document S/C/W/99, 3 March 1999 for details on other countries.
The upper part of each bar represents partial commitments, the lower part full commitments
DC = Developed countries
LDC = Developing countries
AC = Acceding countries

CHN = China

The picture changes quite drastically if we focus on the period after all the liberalization has been phased in. Three indicators are computed by Ianchovichina et al. (2001) for both market access and national treatment commitments: (i) "count coverage" indicating the number of sector/modes-of-supply combinations where a commitment was made relative to the maximum number possible; (ii) "average coverage" providing an arithmetic weighted average of the weights (0 for no commitment, 1 for a full commitment and 0.5 for all partial commitments) allocated to each cell; and (iii) the "no-restriction commitments share" in a country's total commitments as well as in the maximum possible commitments.

Overall, for China, the "count coverage" of market access commitments was 57.4 percent (Table 1). This is much higher than the commitments offered in the Uruguay Round by any other group of countries (including high income countries). The "average coverage," a weighted average count of sectoral coverage which better reflects the extent of liberalization of services, was 38 percent for China again more open than even the high income countries. The share of completely liberal commitments in the maximum possible commitments was 23 percent for China, much higher than that for any other group of developing countries but somewhat lower than that for high income countries. China's commitments on national treatment are deeper and wider than those of all other country groups.

Table 1: *Coverage of specific commitments (percent)*

	High-income Countries[9]	Low- and middle-income countries[10]	Large developing nations[11]	China
Market access				
Unweighted average count (sectors-modes listed as a share of				
	47.3	16.2	38.6	57.4.
maximum possible)				
Average coverage (sectors-modes listed as a share of maximum	35.9	10.3	22.9	38.1
possible, weighted by openness or binding factors)	75.9	63.6	59.3	66.4
Coverage/count (average coverage as a share of the average	57.3	45.5	38.7	40.2
count)	27.1	7.3	14.9	23.1
No restrictions as a share of total offer (unweighted count)				
No restrictions as a share of maximum possible				
National treatment	47.3	16.2	38.8	57.4
Unweighted average count (sectors-modes listed as a share of				
maximum possible)	37.2	11.2	25.5	45.0
Average coverage (sectors-modes listed as a share of	78.6	69.1	66.1	78.4
maximum possible, weighed by openness or binding factors)	65.1	58.0	52.3	63.5
Coverage/count (average coverage as a share of average count)	30.8	9.4	20.2	36.5
No restrictions as a share of total offer (unweighted count)				
No restrictions as a share of maximum possible				
	24.8	6.9	14.3	29.8
Memo item	293	100	239	356
No restrictions on market access and national treatment as a share of maximum possible				
Number of sectors committed				

Source: Ianchovichina et al (2001). Note: The breadth and depth of commitments by other countries are understated because their more recent commitments in telecommunications and financial services have not been taken fully into account.

1.3 A closer look: sector by sector

Typical restrictions

In some respects, China's commitments resemble those made by other countries. For most sectors, modes 1 and 2 are either fully open or unbound, and not subject to specific restrictions. Commitments on mode 4, specified horizontally rather than sector by sector, are also standard: entry is guaranteed only for managers, executives and specialists - who must either be intra-corporate transferees or employed by foreign invested enterprises - and for services salespersons on exploratory business visits. No commitments are made regarding other categories of natural persons, e.g. unskilled personnel or movement not linked to commercial presence.

It is with regard to commitments on commercial presence that we encounter a range of restrictive measures, relating to:

- *Form of establishment*: The typical restriction is the requirement to form a joint venture (JV) which is either an equity joint venture (EJV) or contractual joint venture (CJV). Foreign ownership in EJVs is frequently restricted to specified levels, ranging from minority ownership (49% or less), 50%, majority ownership, to full ownership. There is no commitment to allow establishment of branches by foreign enterprises, except in specific sectors.
- *Geographic scope*: Business activity may be allowed only in specified cities (e.g. Shanghai) or in special economic zones.
- *Business scope*: Transactions may be permitted only with a subset of consumers or restricted in some other way.
- *Regulatory requirements*: Foreign firms may be required to have a certain minimum amount of assets and be established as a representative office for a certain period of time before commencing full business operations.

Interestingly, most restrictions pertain to market access and there are relatively few limitations on national treatment. In fact, one of the striking aspects of China's schedules is the willingness to commit across modes and sectors to full national treatment for foreign providers.

Commitments: past, present and future

How much has policy already changed, and how will it change over the next few years? China's schedules of commitments provide a first source of information. China participated in the Uruguay Round services negotiations and submitted a schedule under GATS in April 1994. Since China was not a Member of the WTO, this schedule did not have legal status. More importantly, it is not clear how far this schedule reflected the actual openness Chinese services markets at that time. Nevertheless, it does provide some indication of the situation then.

As part of its accession negotiations, China submitted a schedule of commitments in October 2001. This schedule has legal status ever since China became a WTO Member, and is an outcome of the toughest services negotiations undertaken in the WTO. Whereas most WTO Members have merely bound the policy status quo or even less, China agreed to significant liberalization to be implemented either immediately or in the near future. One consequence is that the schedule describes the state of actual policy at the time of accession and over the next few years.

Relying on these two schedules, we construct a rough picture in Table 2 of the state of "policy" at three points of time: 1994, 2001, the presumed date of accession, and 2008, the date by which all liberalization commitments will have been phased in (i.e. seven years after accession). The earlier date was chosen to show how far China has already come, and the later date to indicate how far it is committed to go.

Professional services

Commitments on professional services are far more liberal than in 1994, and the sector will be highly liberalized over the next few years. Compared to 1994, China is committed to allow the cross-border supply of professional services, quantitative limitations no longer apply to accountancy firms, taxation services can be offered outside of "economically developed areas", and there are meaningful commitments in urban planning and legal services.

By 2007, geographic and quantitative limitations will be eliminated in legal services, and fully owned foreign subsidiaries can operate in accounting, taxation, architecture, engineering and urban planning services. But some restrictions will persist, especially in legal and medical services. Foreign firms are not allowed directly to participate in legal activity in China and are only entitled to work on legal affairs related to their home country or to entrust work to Chinese firms on behalf of their clients. In medical services, hospitals cannot be fully foreign owned and are still subject to quantitative limitations in line with China's needs.

Computer and related services

This is the one sector where some commitments have actually become less liberal. In 1994, there were no restrictions on establishment in software implementation, systems and software consulting and systems analysis. Now, establishment can only take place through JVs though foreign majority ownership is permitted. Cross border delivery in these services remains unbound but is fully open in all other computer and related services. No future liberalization has been specified.

Telecommunications

Much change is anticipated in this sector over the next few years. Today, foreign providers can provide value added and mobile services in (and between) Shanghai, Guangzhou and Beijing through JVs, subject to stringent restrictions on foreign ownership. By 2004, fixed line services can be provided on similar terms in and between the same cities. Gradually, by 2007, all geographical restrictions will be eliminated and equity restrictions will be relaxed. But even at the end of the period, majority foreign ownership will not be allowed in any area. Furthermore, there is no commitment to allow cross-border delivery of any of these services.[2]

Construction and engineering services

Whereas commercial presence was unbound in 1994, today it is allowed through JVs with foreign majority ownership permitted, but only in foreign-invested construction projects. By 2004, full foreign ownership will be permitted but subject to certain restrictions on business scope.

Distribution services

There were no commitments at all in 1994. Substantial liberalization has already taken place, but restrictions persist on establishment (only through joint ventures), geographical scope (retailing only in five SEZs) and products sold (e.g. not books, newspapers, pharmaceuticals and pesticides). By 2006, the sector will be largely open. Perhaps most strikingly, China has agreed to open up the whole logistical chain of related services, including inventory management; assembly, sorting and grading of bulk lots; breaking bulk lots and redistributing into smaller lots; delivery services; refrigeration, storage, warehousing and garage services; sales promotion, marketing and advertising, installation and after sales services including maintenance and repair and training services. No WTO Member has made such deep commitments in this sector.

[2] The commitment on mode 1 indicates a cross-reference to mode 3, the meaning of which is not clear.

Some restrictions will remain. Salt and tobacco are excluded from the scope of commitments on commission agents and wholesalers. Furthermore, majority foreign ownership will not be allowed in retail chain stores which sell multiple products and different brands of products such as books, newspapers, pharmaceuticals and chemical fertilizers, and have more than 30 outlets. There are no commitments on cross-border delivery of commission agents and wholesale trade services. More interestingly, cross-border supply of retail services is allowed only through mail-order, which presumably covers electronic commerce.

Education services

Cross-border delivery was unbound in 1994 but is now fully open. Commercial presence was also unbound but now can be established through JVs with foreign majority ownership permitted. National treatment is not, however, guaranteed for foreign educational institutions.

Financial services

The 1994 commitments specified that *insurance* services could be supplied through a branch or JV only in Shanghai subject to a number of conditions pertaining to minimum capital and prior presence, globally (thirty years as an insurance company) and locally (three years as a representative office). On accession, non-life insurers are permitted to open a branch or JV with 51 per cent foreign ownership, whereas life insurers are permitted 50 per cent ownership of a JV in a partner of their choice. Non-life insurers can provide "master policy" insurance and insurance of large scale commercial risks without geographic restrictions, and insurance of enterprises abroad as well as property insurance, related liability insurance and credit insurance of foreign-invested enterprises in five cities: Shanghai, Guangzhou, Dalian, Shenzhen and Foshan. Life insurers are permitted to provide individual (not group) insurance to foreigners and Chinese citizens in the same five cities. By 2004, all restrictions will disappear except the foreign ownership limit on life insurers. Licenses are to be awarded solely on the basis of prudential criteria and with no application of quantitative limitations or economic needs tests.

Under the 1994 commitments, foreign *banks* could only operate in specified regions, accept deposits only from non-residents and only in foreign currencies (with some exceptions), and make no loans to Chinese citizens. On accession, geographic and client limitations will be eliminated for foreign currency business. Even though the schedule states that on accession, local currency business will be allowed in 4 cities (Shanghai, Shenzhen, Tianjin and Dalian), there seems to be a binding restriction on clients which will only be relaxed in two years. The entire banking sector will be fully liberalized by 2006. As in the case of insurance, licenses are to be awarded solely on the basis of prudential criteria with no quantitative limitations or economic needs test applied.

There were no commitments on *securities* in 1994. On accession, JVs with up to 33% foreign ownership will be allowed to conduct domestic securities investment fund management business. By 2004, foreign ownership of such ventures will be allowed to increase to 49 per cent. Furthermore, joint ventures with up to 33 per cent foreign ownership will be allowed to underwrite domestic equity issues and underwrite and trade in international equity and all corporate and government debt issues.

Transport services

There were liberal commitments on international maritime transport and certain supporting services even in 1994. The major change is that the depth of commitments across the whole range of transport and auxiliary services will greatly facilitate the provision of multimodal transport services. In road, rail and key auxiliary services, notably storage and warehousing and freight forwarding agency services, restrictive or no commitments shall be replaced on accession by the requirement to enter as joint ventures, and by 2007 there shall be full liberalization. The exception will, of course, be hard rights in air transport which are excluded from the scope of the GATS.

II. THE LOST FREEDOMS: CAUSE FOR CONCERN?

The commitments described above imply a dramatic loss of discretion in policy-making. China has promised to give up, over the next few years, the freedom to restrict new entry and foreign ownership, discriminate between trading partners and in favor of its own firms, and, most generally, the freedom to change its mind. For the most part, the implied discipline is desirable. But the size and distribution of the gains from liberalization will depend on how China uses the freedom it still has to strengthen its regulatory framework and choose an appropriate sequence of reform.

II.1 The freedom to change your mind: Credibility through GATS commitments

In many areas, the Chinese Government has been reluctant to liberalize immediately. Some of the protection is probably a consequence of political economic pressures from vested interests. But in some cases, the Government evidently felt the need to protect the incumbent suppliers from competition either because of infant industry type arguments or to facilitate "orderly exit" – both of which are arguments for temporary protection. But protection once granted can be difficult to remove. The failure of infant industry policies in the past, and the innumerable examples of perpetual infancy (or senility), is attributable in part to the inability of a government to commit itself to liberalize at some future date and hence to confront incumbents with a credible deadline. The binding commitments under the GATS to provide market access by a precise future dates should help to overcome the credibility problem. Failure to honor these commitments creates an obligation to compensate those who are deprived of benefits, making the commitment more credible than a mere announcement of liberalizing intent in the national context. The price in terms of the loss of flexibility would seem to be worth paying.

It is also worth emphasizing that GATS commitments represent only a ceiling on protection and not a floor. China has given up the freedom to liberalize more slowly than specified in its GATS commitments, but it still has the freedom to move faster.

II.2 The freedom to discriminate between trading partners and in favor of domestic firms

The two pillars of non-discrimination under the GATS are the MFN and national treatment obligations, both of which allow exceptions to be listed. China's MFN exemptions are relatively narrow. The only one listed applies to international maritime transport, for cargo sharing agreements with certain countries and to allow JVs and wholly-owned shipping subsidiaries to be formed on the basis of bilateral agreements. In any case, since China has committed to full market access and national treatment on cross-border supply, there seems to be little scope for discriminatory cargo sharing.

There are also surprisingly few limitations on national treatment, and so for the most part China has given up the right to offer preferential treatment to domestic enterprises through *any measure* affecting the supply of services. There is virtually no scope for discriminatory taxation, and discriminatory subsidies can be awarded only in aviation, audiovisual and medical services – and there too only to the extent that such subsidies already exist. The other instances of discriminatory provisions are the following: all legal representatives are required to be resident in China for no less than six months each year; a majority of doctors in JV hospitals must be Chinese; the existing registered capital requirements for JV construction enterprises are slightly different from those of domestic enterprises; JV travel agencies are not allowed to provide services to Chinese traveling abroad; and foreign insurers are subject to a 20 per cent cession requirement with a Chinese Reinsurance company, to be phased out in four years.

But while the scope for explicit discrimination has shrunk, the nature of measures affecting trade in services does offer considerable scope for implicit discrimination. First of all, there is the possibility of variable treatment through domestic regulations such as licensing, recognition of qualifications and other technical regulations. Such discretion is likely to be constrained, but probably not eliminated, by the assurance that licenses in financial services will be issued solely on the basis of prudential criteria and by the requirement of transparency of licensing criteria and decision processes in other areas. Second, China has retained the freedom to impose explicit quantitative restrictions on the number of providers in legal, medical and retailing services. There may also be de facto quotas in some areas, such as those imposed by the scarcity of radio spectrum needed for the provision of mobile telecommunications services, and scarcity of space for department stores or airports in a city.

The GATS MFN obligation applies both to domestic regulations and quotas but there are no precise rules to give this obligation practical content. Article VII of the GATS dealing specifically with recognition agreements pertaining to educational qualifications, licenses, etc. strikes a delicate balance by allowing such agreements, provided they are not used as a means of discrimination and third countries have the opportunity to accede or demonstrate equivalence. There are no rules to ensure the non-discriminatory allocation of quotas. In the past, this was not a major issue because commitments reflected the status quo and quotas, particularly with regard to service suppliers, were descriptions of the existing market structure. In the future, as genuine liberalizing commitments are made, the non-discriminatory allocation of quotas is bound to be an important issue. The instinctive candidate for a non-discriminatory rule is an auction, which also has the virtue of transferring quota rents to the government. It remains to be seen whether the Chinese regulators can resist the temptation to resort to other more discretionary methods of allocating quotas.

It may seem at first sight that there is no real cost to granting preferential treatment in services. Since the protective instrument is often a restrictive regulation which does not generate revenue (or rents), there is no cost to granting preferential access because there is no revenue (or rents) to lose. When the protective instrument is a quota, the implications of preferences depend on who appropriates the rents. Where rents are appropriated by exporters or dissipated, preferential liberalization is again necessarily welfare enhancing for the importing country.

However, preferences in services may impose other more subtle costs. The cost of trade diversion may well be the establishment of poorer quality providers, not just in terms of poorer quality services but also smaller social benefits in the form of knowledge and technological spillovers. Furthermore, the greater importance of sunk costs in a number of services sectors, ranging from basic telecommunications to financial services, suggests that preferential liberalization may have more durable consequences than in the case of goods. For example, allowing the second-best provider to establish may mean that a country is stuck with such a provider even when it subsequently liberalizes on an MFN basis.[3] These considerations suggest that China would do well to resist the reported pressure to grant preferential access to the service suppliers of certain WTO Members.

Grandfather provisions

One of the key difficulties in the accession negotiations arose because of the presence in the Chinese insurance market of firms which enjoyed better conditions than China was prepared to guarantee to new entrants. In particular, the United States life insurance firm AIG was established in Shanghai with full foreign ownership; Allianz (German), Axa (French) and Manulife (Canadian) were 51 per cent foreign owned. As we have seen above, the best China was prepared to offer new entrants was entry through JVs which were 50 per cent foreign-owned. Apparently, this asymmetry in itself was generally acceptable and led to the following "grandfather" provision in China's schedule:

> "The conditions of ownership, operation and scope of activities, as set out in the respective contractual or shareholder agreement or in a license establishing or authorizing the operation or supply of services by an existing foreign service supplier, will not be made more restrictive than they exist as of the date of China's accession to the WTO."

The problem arose because of the implications for branching rights. The key element of China's commitment was the guarantee that "internal branching for an insurance firm will be permitted consistent with the phase out of geographic restrictions". In effect, AIG would be able to expand operations through branches of its fully owned subsidiary in China whereas other new firms could only do so through branches of their 50 per cent owned JVs. This was apparently not acceptable to the European Union. The eventual compromise was a rather convoluted footnote in the Schedule which states:

[3] Where this happens will depend on the importance of sunk costs relative to differences in costs and quality.

> "Any further authorization provided to foreign insurers after accession under more favorable conditions than those contained in this schedule (including the extension of grandfathered investments through branching, sub-branching or any other legal form), will be made available to other foreign service suppliers which so requested."

The solution is messy and could lead to a dispute. If AIG is denied the right to branch from its fully-owned subsidiary, then the US could claim that the assurance contained in the grandfather and internal branching commitments were not being respected. If AIG were allowed the right to branch, and the EU were denied the right to establish fully owned subsidiaries, then the latter could claim that the assurance contained in the footnote was not being respected.[4]

Apart from the legal question of the consistency of the grandfather provisions with MFN, these provisions reflect a relative emphasis on guaranteeing the rights of incumbents. In so far as they provide the benefits of security to investors who are already present in the market rather than to *new* investors, they may not do enough to make markets more contestable. New entrants may even be placed at a competitive disadvantage insofar as differences in ownership and legal form affect firm performance. For example, larger equity shares may make it easier to exercise effective control over the operations of a firm and ensure efficient production, and the marginal cost of providing a service through a branch may be lower than through a subsidiary. However, the fact that there are already several foreign and domestic firms competing in the market may limit the impact of these grandfather provisions.

II.3 The freedom to restrict entry

Apart from the few instances noted above, China has chosen not to limit the number of service providers. The only barrier to new entry is the requirement to enter as a JV,

[4] It was reported in the Financial Times of 6 December 2001 that a compromise had been reached on this issue. Apparently, AIG would be given permission to open two more 100 percent owned branches, but would thereafter have to abide by the same 50 percent rule as all other foreign insurers in the China market. The deal was seen as consistent with WTO rules because the two extra licenses were to be awarded to AIG before China entered the WTO on 11 December 2001. The licenses were to be granted for the cities of Suzhou, near Shanghai, and Beijing.

which is discussed in the next section. Might this be a problem? Are there good reasons to limit entry? Entry restrictions might be justified by the existence of significant economies of scale, e.g. if there are substantial fixed costs of networks, competitive entry could lead to inefficient network duplication.[5] However, entry restrictions are increasingly hard to defend in principle, in the face of technological change and in the face of mounting evidence that competition works.

First of all, entry restrictions change the nature of interaction between incumbents and may well make collusion more likely. Secondly, such restrictions dampen the impact of competition on productive efficiency. Third, the regulator is usually not better placed than the competitive process to determine the optimal number of firms in the market, especially given the difficulty of obtaining information about the cost structure of firms and other sources of regulatory failure. Furthermore, technological advances have significantly lowered network costs even in a sector like fixed line telecommunications, and vertical separation (e.g. through network unbundling) has widened the scope for competitive entry (Smith, 1995). Inefficiencies introduced by duplication of networks may be small compared to operational inefficiencies that can result from a lack of competitive pressure.[6] On this basis, it would seem that there is little reason to worry about excessive entry; rather the priority should be the elimination of the barriers to entry where they remain, e.g. in medical services and retailing.

II.4 The freedom to restrict ownership

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[5] One such possibility is the case of "non-sustainability" of natural monopoly. This could arise, for instance, under some natural monopoly cost conditions, when there exist no prices that will not attract entry, even though single firm supply is efficient. Armstrong et al. (1994, p 106) conclude that "Notwithstanding the logical possibility of this happening, we are doubtful whether it provides a good case for entry restrictions in the utility industries, which are not for the most part remotely contestable and where there is little evidence that cost conditions give rise to non-sustainability."

[6] Interesting evidence in this context is available from the Indian telecommunications sector. Das (2000) estimates a frontier multi-product cost function of the incumbent fixed-line operator, covering 25 years from 1969 to 1994. The study finds the existence of very high economies of both scale and scope in the technology used - the parameter estimates even suggest that telecommunications in India is a natural monopoly. However, the incumbent operator displays great inefficiency, leading to a 26 percent increase of the operator's cost of production. Based on these findings, Das concludes that India's market liberalization program, started in the mid-1990s, is justified, but he argues that there may be a need to regulate entry in order to reduce unnecessary duplication of common costs. Moreover, with continued improvements in technology, the fixed costs of entrants are likely to fall, reducing losses of scale economies and thus increasing the costs of entry restrictions.

The most important restriction on foreign presence in China is the requirement to enter as a joint venture, often with limits on the extent of foreign ownership. In most areas, these limits on ownership are being gradually phased out, but in some cases, e.g. telecommunications and life insurance, they will remain even after all the liberalization commitments have been phased out. What is the rational for such restrictions and what are their implications? Furthermore, what are the consequences of the manner in which they are being phased out?

Joint ventures may, of course, be the preferred choice of the foreign investor if, for instance, local firms have specific assets access to which can only be obtained through collaboration. However, binding ownership restrictions may adversely affect firm performance, because the incentive to undertake costly transfers of technology and improvements in management is related to the expected gains, which in turn are related to the share in profits of an owner. Moreover, changes in the permissible share of ownership in the vicinity of 50 per cent (e.g from 49 per cent to 51 per cent) may have a particularly large impact on performance as a firm obtains full control over a firms operations and has greater freedom to make the changes it deems necessary.

Why is the Chinese governments willing to bear such costs even for a few years? Four types of reasons are possible. Limitations on ownership may seek to balance the efficiency-enhancing and the rent-appropriation aspects of foreign investment. However, rent appropriation could to some extent be prevented by ex ante auctions of equity or ex post taxation of profits.[7] And a more basic question is why rent-generating restrictions on competition continue to exist. Secondly, there is an "infant entrepreneur" argument: foreigners are induced to form equity joint ventures so that local investors can learn by collaborating. As with all such arguments it is difficult to judge whether the current costs are likely to be offset by the eventual benefits. Thirdly, there is an adjustment cost argument: an immediate transfer of control could lead to drastic cuts in surplus labor which gradual reductions in ownership help prevent. A key issue is whether it is possible to address these adjustment costs through direct support to the affected factors rather than

[7] The fear of creating a disincentive for investors might be a reason to refrain from taxation.

by staggered liberalization. Finally, the most important reason is probably a purely political reluctance to allow foreign control of an essential service. Again, these political concerns should be less strong if it is not one foreign monopolist but a number of competing foreign firms that provide the service.

III. THE FREEDOM THAT REMAINS: RESPONDING TO THE REGULATORY CHALLENGE

If China is to make the most of liberalization that it is now committed to undertake, then improving the regulatory framework is critical. Regulation in services, as in goods, arises essentially from market failure attributable to the problems of natural monopoly and inadequate consumer information, and from considerations of equity, across geographic regions and income classes.

III.1 Efficient regulation: Making competition work

The first regulatory priority arises in the so called "locational services" which are frequently characterized by natural monopoly or oligopoly. These markets tend to be concentrated because of the large fixed costs required to create specialized distribution networks: roads and rails for land transport, cables and satellites for communications, and pipes for sewage and energy distribution (UNCTAD and World Bank, 1994). Unless appropriate regulatory mechanisms are put in place, the incumbent can frustrate competition by denying rivals access to essential facilities such as distribution networks and terminals.

China has accepted the regulatory principles specified in the Telecommunications Reference Paper. Thus it has committed to instituting an independent regulator for basic telecommunications services to ensure that the incumbent supplier does not undermine market access by charging prohibitive rates for interconnection to its established networks.[8] In fact, a new supra-ministerial body, the State Council Information

[8] Several countries have found it difficult to create open, competitive telecommunications sector because of a weak regulatory environment. Poland opened up its telecommunications sector to private competition as early as 1990. There was a rush to invest, and about 200 licenses were awarded in the first six years of the newly liberalized regime. The dominant state operator, operating in a weak regulatory system, limited

Management Commission, has recently been set up and is headed by Zhu Rongji, the premier, and Hu Jintao, the vice-president. The commission's establishment has not yet been announced, but it is believed to be modeled on the US Federal Communications Commission.[9] A similar approach needs to be taken in a variety of other network services, including transport (terminals and infrastructure), and energy services (distribution networks).

The creation of a regulator is only a first step. Persuading the dominant interest groups to concede control is fraught with difficulty. For example, in India, a conflict between the Department of Telecommunications (DOT) and the regulatory agency, Telecommunications Regulatory Authority of India (TRAI), as it was initially constituted, hampered progress towards an efficient telecom infrastructure.[10] Absent a truly independent regulator, empowered to rebalance tariffs, enforce fair interconnection agreements, and ensure rapid, equitable issuance of radio spectrum, the benefits of a sector opened to allow private participation and foreign investment could be significantly limited.

In certain market segments, it may not be possible to create conditions for effective competition in the supplies of certain telecommunications, transport and financial services, even if all barriers to entry are eliminated. For two related reasons. First, unlike in the case of goods, national markets are often segmented from the international market due to the infeasibility of cross-border delivery. Secondly, changing technologies may have reduced the optimal scale of operation as well as sunk costs in these sectors, but not enough for small markets to sustain competitive market structures. Some form of final price regulation may, therefore, be unavoidable.

III.2 Regulation to remedy inadequate consumer information

access to its network and benefited from unequal terms for revenue sharing, however. By 1996, only 12 of the 200 licenses were still being used by the few competitive operators to survive.

[9] Financial Times, 17 October 2001. Some concern has been expressed about the autonomy of regulators, because the telecommunications regulator was apparently the main shareholder in China Telecom and China Mobile and the television regulator owns China Central Television, the state TV company (Financial Times, 3 January 2002).

[10] The Indian Government announced a new telecommunications policy on March 26, 1999 that addressed several of these key outstanding issues.

In China's increasingly open markets, priority must be given to strengthening the quality of prudential regulation in intermediation and knowledge-based services, where consumers have difficulty securing full information about the quality of service they are buying (UNCTAD and World Bank, 1994). For example, consumers cannot easily assess the competence of professionals such as doctors and lawyers, the safety of transport services or the soundness of banks and insurance companies. When such information is costly to obtain and disseminate, and consumers have similar preferences about the relevant attributes of the service supplier, the regulation of entry and operations in a sector could increase social welfare. However, the establishment of institutions competent to regulate well is a serious challenge, as is revealed by the difficulties in the financial sector—not only in a number of developing countries but also in the U.S., Sweden and Finland in the 1980s and 1990s.

A separate problem is that domestic regulations to deal with the market failure may themselves become impediments to competition and trade, as a result of differences across jurisdictions in technical standards, prudential regulations, and qualification requirements in professional, financial and numerous other services. For instance, China requires foreign doctors to obtain a license from the Ministry of Public Health and foreign accountants to pass the Chinese national CPA examination. In many cases, the impact on trade is an incidental consequence of the pursuit of a legitimate objective, but in some cases regulation can be a particularly attractive means of protecting domestic suppliers from foreign competition. Multilateral trade rules on domestic regulations may contribute to domestic reform by helping sift the legitimate from the protectionist. To this end, negotiations are underway to develop GATS rules for domestic regulations. The core of these disciplines may well be the so called "necessity test" which seeks to establish whether a particular regulation is more burdensome than necessary to achieve a legitimate objective.

III.3 Regulation to ensure universal service

Two quite different equity-related concerns arise. First, opening up essential services to foreign or domestic competition could have an adverse effect on the poor—which is often cited as a reason for the persistence of public monopolies. However, a more efficient solution is to have regulations with a social purpose. Second, the restrictions on the geographical scope of services liberalization could have a strong and durable impact on the distribution of economic activity across regions.

Where China is a relatively inefficient producer of a service, liberalization and the resultant foreign competition are likely to lead to lead to a decline in domestic prices and improvement in quality. But there is a twist. Frequently, the prices pre-liberalization were not determined by the market but set administratively, and are kept artificially low for certain categories of end-users and/or types of services products. Thus, rural borrowers paid lower interest rates than urban borrowers, and prices of local telephone calls and public transport were kept lower than cost of provision. This structure of prices is sustained through cross-subsidization within public monopolies or through government financial support. Liberalization threatens these arrangements. Elimination of restrictions on entry imply an end to cross-subsidization because it is no longer possible for firms to make extra-normal profits in certain market segments. And privatization could mean the end of government support.

Reform programs can accommodate universal service obligations by imposing this requirement on new entrants in a non-discriminatory way. Thus, such obligations were part of the license conditions for new entrants into fixed network telephony and transport in several countries. However, subsidies have often proved more successful than direct regulation in ensuring universal access (Estache et al., 2001). The Chilean government adopted a scheme that permitted it to leverage over $2 million in public funds into $40 million in private investment; this resulted in installation of telephones in 1,000 localities at about ten percent of the costs of direct public provision. Public subsidies can also be directed to the consumer rather than the provider (Cowhey and Klimenko, 1999). The choice of appropriate instrument will probably have to be made on a sector-by-sector basis.

Phased liberalization and geographical inequalities

A remarkable feature of China's dramatic expansion in international trade over the past two decades has been the concentration of export-oriented industries in coastal regions. The four main coastal provinces (Guangdong, Jiangsu, Fujian, and Shanghai) have been the main recipients of outward-oriented foreign investment, with the remaining portion going either to other coastal provinces or regions adjoining coastal areas. Thus, while China's economic reforms have been successful in raising living standards for a considerable share of the population, a large number of Chinese people in inland provinces still live below the poverty line.

A factor responsible for coastal agglomeration has been the inefficiencies in China's internal service systems, ranging from transport to telecommunications. Transport infrastructure disparities between the coastal and inland provinces narrowed considerably following policies aimed at promoting more regionally balanced economic development since 1990. But there is evidence to suggest that it is not the availability of transport infrastructure *per se* that precluded inland provinces from actively participating in foreign trade. Rather, the inadequacies associated with transport services are the more binding constraint in better integrating China's hinterland economy.[11]

The geographical limitations on liberalization commitments could well accentuate these inter-regional inequalities, even though the limitations are to be phased out over time. The existing enclaves of development are likely to witness faster improvements in service quality resulting from early liberalization. These improvements will cause even more

[11] For instance, though there has been significant increase in the volume of container traffic in China since 1990, the increase is largely confined to coastal regions, and associated with the ocean-going leg of travel. Container traffic in inland areas is much less, with no significant change in the percentage of sea borne containers traveling beyond port cities and coastal provinces. Truck rates for moving a container 500 kilometers inland are estimated to be about three times more, and the trip time five times longer, than they would be in Europe or United States. The inter-modal transport system was found to be poorly integrated, with no streamlined procedures to support the continuous movement of containers between the coast and inlands.

economic activity to gravitate to these areas. Eventually, with liberalization of services in the hinterland, there may be greater diffusion of activity. But in so far as sunk costs are important, the earlier agglomeration is unlikely to be completely reversible and inequalities may persist. These considerations would seem to strengthen the case for eliminating the geographical restrictions simultaneously rather than sequentially.

III.4 Adjustment costs

Different modes of supply have different effects on factor markets. Cross-border trade and consumption abroad resemble goods trade in their implications. The impact of the movement of factors depend critically on whether they are substitutes or complements for domestic factor services. Given the structure of factor prices in China, we would typically expect liberalization to lead to an inflow of capital and skilled workers. Such inflows would tend to be to the advantage of the unskilled poor—increasing employment opportunities and wages.[12] Interestingly, it has been shown that even when foreigners compete with local skilled workers in a services sector, the productivity boost to the sector from allowing foreigners access could lead to an increase in the demand for domestic skilled workers – the scale effect could outweigh the substitution effect (Markusen, Rutherford, and Tarr, 2000). Given these predictions, why are workers in China sometimes skeptical about the benefits of liberalization? One concern is the possible reduction in employment in formerly public monopolies which have frequently employed surplus labor.

But there is also evidence that pessimism may not always be justified. For example, a number of developing countries have managed to maintain or even increase employment in their liberalized telecommunications sectors. Since China still has a low teledensity outside the big cities (in the vicinity of 10 lines per 100 people), a large part of telecom

[12] The poor are likely to be unskilled, so the question arises as to which services sectors are they likely to be employed in? Data on the skill composition of the work force in services sectors is only available at a rather aggregate level. Still a certain pattern can be inferred. Construction, distribution and personal services tend to be unskilled-labor intensive, whereas communications, financial and business services tend to be skilled-labor intensive.

investment is being directed towards building wire line and mobile networks which are labor intensive and probably helping to maintain or raise employment levels. The introduction of competition should help. For instance, Petrazzini and Lovelock (1996) find in a study of 26 Latin American and Asian economies that telecom markets with competition were the only ones that consistently increased employment levels, while two thirds of the countries with monopolies saw considerable declines in their telecom work force. Despite these optimistic projections, it is likely that reform programs will require complementary policies to mitigate any social and economic costs of adjustment in factor markets.

IV. SEQUENCING REGULATORY REFORM AND TRADE AND INVESTMENT LIBERALISATION

Regulatory improvements take time. Changes in the patterns of competition and ownership can be implemented instantaneously in principle, but China, like many other countries, has chosen to introduce changes gradually. One question is: how does the impact of different elements of reform depend on the extent to which other reforms have been implemented, i.e. how does the *interaction* of the different elements of policy reform affect performance? The other, more subtle question is, does the *sequence* of reforms have transitory and permanent effects on performance? Some preliminary observations on these questions, which are relevant to the design of transition strategies, are presented below.

Telecommunications

Figure 1 depicts the sequence of telecommunications liberalization in a number of Asian countries. China is among the few that have allowed some degree of competition (in long distance services) prior to allowing a change of ownership in the incumbent supplier and creating an independent regulator. Fink et al (2001), in a study of telecommunications reform in Asia, Africa and Latin America, find that while each element of reform has a positive impact on performance, the effect of each is magnified when others are also implemented. Moreover, privatizing the incumbent after introducing competition (the

Chinese route), is likely to lead to a higher level of mainline penetration than the opposite sequence.

Privatization before introducing competition may create a privileged incumbent who has a first-mover advantage in the market. The incumbent may be able to make certain strategic decisions or indulge in lobbying to affect the eventual form of competition.[13] For instance, in South Africa, foreign and domestic shareholders in the privatized telecommunications monopoly managed to persuade the government to allow only one new entrant rather than the planned two. Regulating the terms of interconnection for new entrants may also be more difficult in an arms-length relationship with a private provider whose costs are difficult to observe than with a public provider whose cost information may be easier to access. Entry may be easier on symmetric terms with an inefficient public incumbent than on asymmetric terms with an efficient private incumbent.

Financial services

In financial services, internationalization raises several concerns: the threat to the survival of local banks and financial companies; the loss of monetary autonomy; and the increased volatility of capital flows. Many of these concerns do not relate just to internationalization of financial services, but also to the processes of financial deregulation and capital account liberalization. But the extent of benefits and costs of internationalization depend, to a great extent, on how it is phased in with these other two types of financial reform, and, in particular, the strengthening of prudential regulation and supervision.

Many countries that have successful experiences opening up to foreign financial firms (Brazil, Chile, Hungary, Ireland, Poland, Portugal, Spain and others) also engaged in a process of domestic deregulation and, consequently, reaped substantial gains (World Bank, 2001). The experience of the countries acceding to the EU, suggests that internationalization and domestic deregulation can be mutually reinforcing. Increased

[13] A public sector provider could also behave in this way but presumably if the government' objective is liberalization, it is somewhat easier to draw along a public provider.

foreign entry bolstered the financial sector framework by creating a constituency for improved regulation and supervision, better disclosure rules, and improvements in the legal and regulatory framework for the provision of financial services. It also added to the credibility of rules.

Most of these considerations are relevant to China. Non-performing loans account for about 28% (the unofficial figure is about 50%) or more of the assets of the big four banks, which account for about 80% of total banking sector assets[14]. The big four are already thought to be insolvent (Fitch and Moody's). One of the main reasons for the existence of large amounts of bad loans is that interest rates are still controlled by the People's Bank of China (PBOC). They are unusually low in order to make it easier for state owned enterprises to borrow funds at well below the market clearing equilibrium rate of interest.[15] This has engineered a huge transfer of wealth from individual savers to state-owned enterprises. Two-thirds of credit resources went to state owned enterprises that generate only one-third of industrial output. The official target of 2003 for interest rate liberalization has already been unofficially pushed back to 2005 for fear that the ensuing competition for deposits will drive business away from the four large banks, which would then collapse, leading to a serious banking crisis.[16]

While the two reform processes (internationalization and domestic financial deregulation) are mutually reinforcing, they are not sufficient in themselves. More than in other sectors, the gains and costs of financial reform depend on the regulatory and supervisory framework, (Barth et al., 2001). Experience shows that it is vital to strengthen the supporting institutional framework in parallel with domestic deregulation and internationalization. In the absence of such strengthening, foreign entry may entail risks. Foreign bank entry can destabilize local banks by taking away the lowest risk

[14] David Lague (2001), and Financial Times Surveys on China, October 2001.
[15] In 1995, savings deposits received interest at a paltry 3.15%, while loans for working capital were being charged only 11% - they should have been charged about 21% after factoring in the rate of inflation. The current one year rate on savings deposits is about 2.25%.
[16] Source: Business China, May 7th, 2001.

business—including large, exporting firms—leaving local banks to venture further out on the risk frontier.

Having a supportive institutional framework is even more obvious when it comes to capital account liberalization.[17] Experiences in recent years, most recently in Asia, have shown that achieving the potential gains, and avoiding the risks, of capital account liberalization depend to a great extent on whether domestic institutions and prudential authorities have developed sufficiently to ensure that foreign finance will be channeled in productive directions (Eichengreen, 2002).

V. CONCLUSIONS

China's GATS commitments represent the most radical services reform program negotiated in the WTO. China has promised to eliminate over the next few years most restrictions on foreign entry and ownership, as well as most forms of discrimination against foreign firms. Trading partners are naturally interested in ensuring the implementation of these commitments.[18] However, realizing the gains from, and perhaps even the sustainability of, liberalization will require the implementation of complementary regulatory reform and the appropriate sequencing of reforms.

Three issues in particular deserve attention. Initial restrictions on the geographical scope of services liberalization could encourage the further agglomeration of economic activity in certain regions – to an extent that is unlikely to be reversed completely by subsequent country-wide liberalization. It may, therefore, be worth examining whether these restrictions could be phased out more quickly. Secondly, restrictions on foreign ownership (temporary in most sectors but more durable in telecommunications and life insurance) may dampen the incentives of foreign investors to improve firm performance. The rationale for these restrictions also merits greater scrutiny. Finally, improved

[17] Since China has made only limited commitments on cross-border trade in financial services, its GATS commitments do not require it to allow a high degree of capital mobility, except in so far as capital inflows are required to establish commercial presence.
[18] In fact, the United States has already raised the issue in the WTO's Services Council about whether China's current rules for express delivery services and branching by non-life insurance companies conform to its GATS commitments (Inside US Trade, 29 March 2002).

prudential regulation and measures to deal with the large burden of non-performing loans on state banks are needed to deliver the benefits of liberalization in financial services; and in basic telecommunications and other network-based services, meaningful liberalization will be difficult to achieve without strengthened pro-competitive regulation.

Table 2: China's Commitments: Past, Present and Future

PROFESSIONAL SERVICES			
Sector	1994	2001	2008
Legal services	No commitments	Modes 1 & 2: none Mode 3: Only though one rep. office which is allowed to engage in profit-making activities, but only in specified cities. Business scope restricted to home country legal affairs for Chinese and China-based clients, and to entrusting, on behalf of foreign clients, Chinese law firms to deal with Chinese legal affairs.	CONTINUED RESTRICTIONS ON BUSINESS SCOPE Mode 3: Geographic and quantitative limitations will be eliminated by 2002.
Accounting, auditing and bookkeeping services	Modes 1 & 2: unbound Mode 3: Through branch offices and CJVs subject to limitations on minimum size, aggregate number (15), and geographical scope (SEZs). Auditing reports are only valid if a Chinese CPA title is obtained.	FULLY LIBERALIZED except that partnerships and incorporated accounting firms are limited to CPAs licensed by Chinese authorities.	
Taxation	Mode 1: none Mode 2: unbound Mode 3: Through branch offices subject to limitations on minimum size and geographical scope (SEZs).	Mode 2: none Mode 3: Only through CJVs, with majority foreign ownership permitted.	FULLY LIBERALIZED Mode 3: none, wholly foreign owned subsidiaries permitted by 2007.
Architecture and engineering	Mode 1: unbound Mode 2: none Mode 3: only through an EJV or CJV. Registered in own country	Mode 1: none for scheme design; otherwise cooperation with Chinese professional organisations is required. Mode 3: only through an EJV or CJV. Registered in own country and engaged in architecture/engineering services in home country.	FULLY LIBERALIZED EXCEPT FOR MODE 1 RESTRICTIONS. Mode 3: wholly foreign owned subsidiaries permitted by 2006.
Urban planning (excluding general urban planning)	Mode 1: unbound Mode 2: none Mode 3: unbound	Mode 1: none for scheme design; otherwise cooperation with Chinese professional organisations is required. Mode 3: only through an EJV or CJV.	FULLY LIBERALIZED EXCEPT FOR MODE 1 RESTRICTIONS. Mode 3: wholly foreign owned subsidiaries permitted by 2006.
Medical and dental services	Mode 1: unbound Mode 2: unbound Mode 3: only through an EJV or CJV with a quantitative limitation based on a needs test and approval by the Ministry of Public Health and MOFTEC. CJV or EJV solely responsible for foreign exchange balance and profits and losses. Majority of personnel must be Chinese. Mode 4: foreign doctors can provide services for six months (may extend to a year) provided a license is obtained at provincial level and they are contracted by Chinese medical institutions.	Mode 1: none Mode 2: none Mode 3: foreign majority ownership explicitly permitted, and not required to accept sole responsibility for foreign exchange balance and profits and losses. But still subject to quantitative limitations based on a needs test. Mode 4: licenses can be obtained from the Ministy of Public Health, and a contract is not required.	FULL FOREIGN OWNERSHIP NOT ALLOWED AND NEEDS-BASED QUOTAS.

COMPUTER AND RELATED SERVICES

Sector	1994	2001	
Consultancy services related to the installation of computer hardware Data processing and tabulation Time-sharing	Mode 1: Unbound Mode 2: None Mode 3: None Mode 4: Qualifications: BA and 5 years experience	Modes 1-3: FULLY LIBERALIZED Mode 4: Qualifications: BA and 3 years experience	
Software implementation Systems and software consulting Systems analysis	Mode 1: Unbound Mode 2: None Mode 3: None Mode 4: Qualifications: BA and 5 years experience	Mode 1: Unbound Mode 2: None Mode 3: Only through JVs with foreign majority ownership permitted Mode 4: Qualifications: BA and 3 years experience	
Systems design Programming Systems maintenance Data processing Input preparation	Mode 1: Unbound Mode 2: None Mode 3: Through EJV only. Mode 4: Qualifications: BA and 5 years experience	Mode 1: None Mode 2: None Mode 3: Only through JVs with foreign majority ownership permitted Mode 4: Qualifications: BA and 3 years experience	

TELECOMMUNICATIONS			
Sector	1994	2001	2008
Value added	No commitments	Mode 1: unclear Mode 2: None Mode 3: Through JVs with a foreign investment limit of 30% only in Shanghai, Guangzhou and Beijing.	By 2002: expansion in geographical area, and foreign investment limit to 49%. By 2003: no geographic restriction and FOREIGN INVESTMENT LIMIT TO 50%.
Basic telecommunications: mobile voice and data	No commitments	Mode 1: unclear Mode 2: None Mode 3: Through JVs with a foreign investment limit of 25% only in and between Shanghai, Guangzhou and Beijing.	By 2002: expansion in geographical area, and foreign investment limit to 35%. By 2004: FOREIGN INVESTMENT LIMIT TO 49%. By 2006: no geographic restriction.
Basic telecommunications: fixed-line services	No commitments	Mode 1: unclear Mode 2: none Mode 3: unbound	By 2004: through JVs with a foreign investment limit of 25% only in and between Shanghai, Guangzhou and Beijing. By 2006: expansion in geographical area, and foreign investment limit to 35%. By 2007: no geographic restriction and FOREIGN INVESTMENT LIMIT TO 49%.

CONSTRUCTION			
Construction and related engineering	Mode 1: unbound Mode 2: none Mode 3: unbound	Mode 1: unbound Mode 2: none Mode 3: Through JVs with foreign majority ownership permitted and only foreign-invested construction projects.	RESTRICTIONS ON BUSINESS SCOPE OF FULLY FOREIGN-OWNED ENTERPRISES Mode 3: By 2004, fully foreign-owned enterprises permitted but only in projects financed by foreign investment and/or grants, or by loans from IFIs or those which are technically difficult for Chinese enterprises.

DISTRIBUTION			
Commission agents and wholesale trade, and a full range of subordinated services, including after sales services.	No commitments	Mode 1: unbound Mode 2: none Mode 3: Foreign-invested enterprises are permitted to distribute their products manufactured in China.	LIBERALIZED EXCEPT CROSS BORDER DELIVERY AND TWO PRODUCTS. Mode 3: By 2002, through JVs subject to restrictions on products, to be phased out by 2006 (except salt and tobacco). By 2003, foreign majority ownership allowed and no geographic or quantitative restrictions.
Retailing and a full range of subordinated services, including after sales services.	Non commitments	Mode 1: unbound except for mail order Mode 2: none Mode 3: through JVs (not foreign majority controlled) in 5 SEZs and 8 cities subject to quotas (e.g. 4 in Beijing and Shanghai), restrictions on products (not books, newspapers, pharmaceuticals, pesticides, chemical fertilisers, etc.).	CONTINUED RESTRICTIONS ON LARGE CHAIN STORES. Mode 3: By 2003, all provincial capitals open and by 2004, no more geographical restrictions; by 2006, no restrictions on products; foreign majority control allowed except in chain stores with more than 30 outlets selling a range of products.
Franchising	No commitments	Mode 1: none Mode 2: none Mode 3: unbound	FULLY LIBERALIZED BY 2004. Mode 3: By 2004, none.

EDUCATIONAL AND ENVIRONMENTAL SERVICES			
Educational services excluding special education (e.g. military and political) and national compulsory education	Mode 1: unbound Mode 2: none Mode 3: unbound Mode 4: subject to licensing from SBFE and SEC, and possession of MA and professional title.	Mode 1: none Mode 2: none Mode 3: ONLY THROUGH JVs with foreign majority ownership permitted (national treatment: unbound) Mode 4: subject to invitation or employment by Chinese institution, and possession of BA, 2 years experience, and professional title.	
Environmental services	No commtiments	Mode 1: unbound except for consultation services. Mode 2: none Mode 3: through JVs with foreign majority ownership permitted	

FINANCIAL SERVICES			
Insurance (except statutory insurance)	Mode 1: unbound Mode 2: unbound Mode 3: through a branch or JV only in Shanghai, subject to minimum local and global asset and local presence (as rep. office) requirements.	Mode 1: unbound except for international maritime, aviation and transport insurance and reinsurance, and certain types of brokerage. Mode 2: none, but unbound for brokerage. Mode 3: Form of establishment: Non-life: through a branch or JVs with 51% foreign ownership; Life: through JVs with 50% foreign ownership. Geographic limitation: only in	By 2004, FULLY LIBERALIZED EXCEPT 50% FOREIGN OWNERSHIP LIMIT IN LIFE INSURANCE. Mode 3: By 2003, no establishment restrictions in non-life. By 2004, no geographic restrictions. By 2004, no restrictions on business scope By 2005, no cession

		5 cities. Business scope: only selected forms of non-life insurance. Life only to individuals, not groups. Licenses: no quotas but subject to minimum asset and duration of establishment requirements. Upon accession, a 20 per cent cession required of all lines of the primary risks for non-life, personal accident and health insurance business with an appointed Chinese Reinsurance Company.	requirement.
Banking	Mode 1: unbound Mode 2: unbound Mode 3: through a branch, subsidiary JV only in specified regions, subject to minimum asset and local presence (as rep. office) requirements; acceptance of deposits only from non-residents in foreign currencies (with some exceptions), and no loans to Chinese citizens.	Mode 1: unbound except for provision of data, advice, etc. Mode 2: none. Mode 3: geographic limitation: none for foreign currency business, but local currency only in 4 cities. Inter-regional supply of services permitted. Clients: only foreign currency business. Licenses: only prudential criteria.	FULLY LIBERALIZED BY 2006. Mode 3: Geographic limitations phased out gradually by 2006. Clients: local currency business with Chinese enterprises by 2003 and all clients by 2006.
Securities	No commitments.	Mode 1: unbound except B share business. Mode 2: none. Mode 3: Unbound, except rep. offices may become special members of CSEs, and through JVs with up to 33% foreign ownership to conduct domestic securities investment fund management business.	Mode 3: by 2004, 49% foreign ownership in JVs to conduct domestic securities investment fund management business; and through JVs with up to 33% foreign ownership to underwrite A shares, and underwrite and trade B and H shares, as well as government and corporate debts, launching of funds.
TOURISM AND TRAVEL RELATED SERVICES			
Hotels	Mode 1: unbound Mode 2: None Mode 3: though JVs subject to needs test at central and local levels.	Mode 1: unbound Mode 2: None Mode 3: though JVs with foreign majority ownership permitted.	FULLY LIBERALIZED BY 2005.
Travel agency and tour operator	No commitments	Mode 1: unbound Mode 2: None Mode 3: though JVs subject to geographical and business scope restrictions.	FULLY LIBERALIZED BY 2007.
TRANSPORT SERVICES			
A. Maritime Transport			
International transport	Mode 1: none Mode 2: none Mode 3: unbound	Mode 1: none Mode 2: none Mode 3: though JVs subject to 49% foreign ownership limits to operate only a Chinese flag fleet.	
Auxiliary services	Mode 1: unbound Mode 2: None Mode 3: though JVs only	Mode 1: unbound Mode 2: None Mode 3: though JVs only, with foreign majority ownership permitted.	
B. Internal waterways	Mode 1: only international shipping in ports open to	As in 1994.	

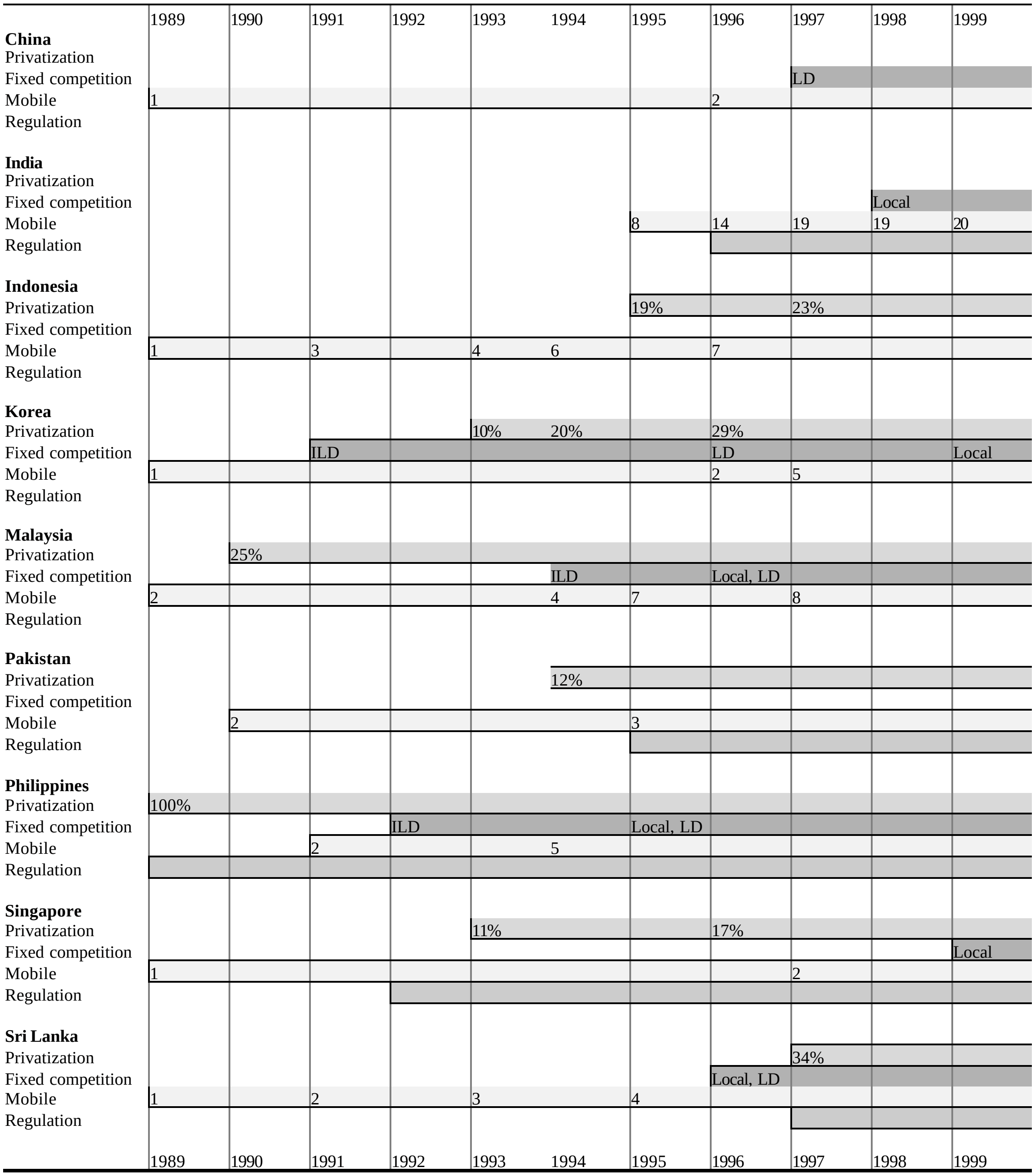
	foreign vessels permitted Mode 2: None Mode 3: unbound		
C. Air transport			
Aircraft repair and maintenance	No commitments	Mode 1: unbound Mode 2: None Mode 3: though Chinese controlled JVs and subject to an economic needs test.	
Computer reservation	No commtitments	Mode 1: by connection with Chinese CRS, etc. Mode 2: None Mode 3: unbound	
E. Rail transport	No commitments	Mode 1: none Mode 2: none Mode 3: though JVs with a foreign ownership limit of 49%.	FULLY LIBERALIZED BY 2007 (Mode 3: majority ownership by 2004)
F. Road transport (freight)	Mode 1: unbound Mode 2: None Mode 3: though JVs subject an economic needs test	Mode 1: none Mode 2: none Mode 3: though JVs with a foreign ownership limit of 49%.	FULLY LIBERALIZED BY 2004 (Mode 3: majority ownership by 2002)
H. Services auxiliary to all modes of transport			
Storage and warehousing	Commitments only for maritime transport, as above.	Mode 1: unbound Mode 2: none Mode 3: though JVs with a foreign ownership limit of 49%.	FULLY LIBERALIZED BY 2004 (Mode 3: majority ownership by 2002)
Freight forwarding agency services)	Commitments only for maritime transport, as above.	Mode 1: none Mode 2: none Mode 3: though JVs with a foreign ownership limit of 50% and subject to minimum capital requirements.	FULLY LIBERALIZED BY 2005 (Mode 3: majority ownership by 2002)

Annex Table 1: CHINA - Structure of market access commitments

Sector	Mode 1			Mode 2			Mode 3			Mode 4		
	F	**P**	**N**	**F**	**P**	**N**	**F**	**P**	**N**	**F**	**P**	**N**
Business Services												
Legal Services	0	1	0	0	1	0	0	1	0	0	1	0
Accounting/auditing/bookkeeping	1	0	0	1	0	0	0	1	0	0	1	0
Architectural Services	0	1	0	0	1	0	0	1	0	0	1	0
Medical & dental services	1	0	0	1	0	0	0	1	0	0	1	0
Data processing services	0	1	0	0	1	0	0	1	0	0	1	0
R&D services (natural sciences)	0	1	0	0	1	0	0	1	0	0	1	0
Advertising services	1	0	0	1	0	0	0	1	0	0	1	0
Management consulting services	0	1	0	0	1	0	0	1	0	0	1	0
Communication Services												
Courier services	0	1	0	0	1	0	0	1	0	0	1	0
Voice telephone services	0	1	0	0	1	0	0	1	0	0	1	0
Private leased circuit services	0	1	0	0	1	0	0	1	0	0	1	0
Electronic mail	0	1	0	1	0	0	0	1	0	0	1	0
Online info & data base retrieval	0	1	0	1	0	0	0	1	0	0	1	0
Audiovisual services	0	1	0	0	1	0	0	1	0	0	1	0
Construction, Engineering												
Construction work (building)	0	0	1	0	1	0	0	1	0	0	1	0
Construction work (civil engin.)	0	0	1	0	1	0	0	1	0	0	1	0
Distribution												
Wholesale trade	0	1	0	0	1	0	0	1	0	0	1	0
Retailing services	0	1	0	0	1	0	0	1	0	0	1	0
Educational Services												
Secondary education	0	0	1	0	1	0	0	1	0	0	1	0
Adult education	0	0	1	0	1	0	0	1	0	0	1	0
Environmental Services												
Sewage services	0	1	0	0	1	0	0	1	0	0	1	0
Refuse disposal	0	1	0	0	1	0	0	1	0	0	1	0
Financial Services												
Non-life insurance	0	1	0	0	1	0	0	1	0	0	1	0
Acceptance of deposits	0	1	0	0	1	0	0	1	0	0	1	0
Lending of all types	0	1	0	0	1	0	0	1	0	0	1	0
Trading in securities	0	1	0	1	0	0	0	1	0	0	1	0
Health Related, Social Services												
Hospital services												
Social services												
Tourism Services												
Hotels and restaurants	1	0	0	1	0	0	0	1	0	0	1	0
Travel agencies	1	0	0	1	0	0	0	1	0	0	1	0
Recreational Services												
Entertainment services												
News agency services												
Transport Services												
Maritime (freight)	0	1	0	0	1	0	0	1	0	0	1	0
Rail (passenger)												
Rail (freight)	1	0	0	1	0	0	0	1	0	0	1	0
Road (passenger)												
Road (freight)	1	0	0	1	0	0	0	1	0	0	1	0
TOTAL OF ABOVE (31 sub-sector)	7	20	4	10	21	0	0	31	0	0	31	0
	23%	64%	13%	32%	68%	0%	0%	100%	0%	0%	100%	0%

China		Number of			PERCENTAGES											
Market access		sub-sectors	W/120			Mode 1			Mode 2			Mode 3			Mode 4	
		committed to	Universe	% of W/120	Full	Partial	None	Full	Partial	None	Full	Partial	None	Full	Partial	None
Business services		**30**	**46**	65	47	53	0	47	53	0	0	100	0	0	100	0
	Profess	8	11	73	38	63	0	38	63	0	0	100	0	0	100	0
	Computer	4	5	80	50	50	0	50	50	0	0	100	0	0	100	0
	R&D	0	3	0												
	Real Estate	2	2	100	100	0	0	100	0	0	0	100	0	0	100	0
	Rental/leasing	5	5	100	0	100	0	0	100	0	0	100	0	0	100	0
	Other	11	20	55	64	36	0	64	36	0	0	100	0	0	100	0
Communication		**18**	**24**	75	0	100	0	39	61	0	0	100	0	0	100	0
	Postal	0	1	0												
	Courier	1	1	100	0	100	0	0	100	0	0	100	0	0	100	0
	Telecom	14	15	93	0	100	0	50	50	0	0	100	0	0	100	0
	Audiovisual	3	6	50	0	100	0	0	100	0	0	100	0	0	100	0
	Other	0	1	0												
Construction		**5**	**5**	100	0	0	100	0	100	0	0	100	0	0	100	0
	Building	1	1	100	0	0	100	0	100	0	0	100	0	0	100	0
	Civil Engineering	1	1	100	0	0	100	0	100	0	0	100	0	0	100	0
	Installation	1	1	100	0	0	100	0	100	0	0	100	0	0	100	0
	Building completion	1	1	100	0	0	100	0	100	0	0	100	0	0	100	0
	Other	1	1	100	0	0	100	0	100	0	0	100	0	0	100	0
Distribution		**4**	**5**	80	25	50	25	50	50	0	0	100	0	0	100	0
	Commission agents	1	1	100	0	0	100	0	100	0	0	100	0	0	100	0
	Wholesale	1	1	100	0	100	0	0	100	0	0	100	0	0	100	0
	Retail	1	1	100	0	100	0	100	0	0	0	100	0	0	100	0
	Franchising	1	1	100	100	0	0	100	0	0	0	100	0	0	100	0
	Other	0	1	0												
Education		**5**	**6**	100	0	0	100	0	100	0	0	100	0	0	100	0
	Primary	1	1	100	0	0	100	0	100	0	0	100	0	0	100	0
	Secondary	1	1	100	0	0	100	0	100	0	0	100	0	0	100	0
	Higher	1	1	100	0	0	100	0	100	0	0	100	0	0	100	0
	Adult	1	1	100	0	0	100	0	100	0	0	100	0	0	100	0
	Other	1	1	100	0	0	100	0	100	0	0	100	0	0	100	0
Environmental		**4**	**4**	100	0	100	0	0	100	0	0	100	0	0	100	0
	Sewage	1	1	100	0	100	0	0	100	0	0	100	0	0	100	0
	Refuse disposal	1	1	100	0	100	0	0	100	0	0	100	0	0	100	0
	Sanitation	1	1	100	0	100	0	0	100	0	0	100	0	0	100	0
	Other	1	1	100	0	100	0	0	100	0	0	100	0	0	100	0
Financial		**13**	**17**	76	23	77	0	23	77	0	0	100	0	0	100	0
	Insurance	4	4	100	0	100	0	0	100	0	0	100	0	0	100	0
	Banking	9	12	75	33	67	0	33	67	0	0	100	0	0	100	0
	Other	0	1	0												
Health		**0**	**4**	0												
	Hospital	0	1	0												
	Other Human	0	1	0												
	Social	0	1	0												
	Other	0	1	0												
Tourism		**2**	**4**	50	100	0	0	100	0	0	0	100	0	0	100	0
	Hotels	1	1	100	100	0	0	100	0	0	0	100	0	0	100	0
	Travel Agency	1	1	100	100	0	0	100	0	0	0	100	0	0	100	0
	Tourist Guides	0	1	0												
	Other	0	1	0												
Recreational		**0**	**5**	0												
	Entertainment	0	1	0												
	News agency	0	1	0												
	Library	0	1	0												
	Sporting	0	1	0												
	Other	0	1	0												
Transport		**12**	**35**	34	17	58	25	42	58	0	0	83	17	0	100	0
	Maritime	2	6	33	0	100	0	0	100	0	0	100	0	0	100	0
	Internal Waterways	1	6	17	0	100	0	100	0	0	0	0	100	0	100	0
	Air	2	5	40	0	50	50	50	50	0	0	50	50	0	100	0
	Space	0	1	0												
	Rail	1	5	20	100	0	0	100	0	0	0	100	0	0	100	0
	Road	2	5	40	50	50	0	50	50	0	0	100	0	0	100	0
	Pipeline	0	2	0												
	Auxiliary	4	4	100	0	50	50	25	75	0	0	100	0	0	100	0
	Other	0	1	0												

Figure 2: Sequence of telecommunications reform in 13 Asian countries, 1989-1999



Source: World Bank/ITU Telecommunications Policy Database

Notes: The percentage figures indicate the share of private equity ownership in the incumbent operator. Local, LD and ILD refer to the local, long distance and international fixed-line service segments, respectively. The number in the mobile row corresponds to the number of cellular operators in the country. "Regulation" only captures the existence of a separate regulatory agency.

Source: Fink, Mattoo and Rathindran (2001).