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China's Telecommunications Services Sector: Implications for World Economy*

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Abstract:

The paper analyzes why after more than a decade China's telecom service sector is not fully open. What prompted Government to allow FDI to come in a phased and geographically restricted manner. What kind of regulations Government has put in place to protect the interests of foreign investors. How this sector performed during the global financial crisis and what role FDI played in the sector.

The findings suggest that it is handiwork of the Chinese Government to retain the sector as restricted. It allowed limited FDI to come and geographically available to consumers to gauze the initial impact, and keep it an extremely urbanized affair. Ideological reasons also played a role in restricting FDI in telecom services and allowed the sector to move quite cautiously. On the whole, State control of communications network and allowing or disallowing of FDI has long been viewed as one of the important aspects of security and sovereignty. The price competitiveness and discomfort to the consumers have been ignored in the best interests of national sovereignty and security. It concludes China's regulatory framework for telecommunications is relatively opaque and difficult to understand. The sector never received 'State Patronage' as was extended to the manufacturing sector.

Key Words: Telecommunications Sector, WTO, FDI, Sovereignty and Security

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1. INTRODUCTION

China's telecommunication sector currently is one of the fastest growing sectors in the world.¹ Constant upgradation of technology, business activity, consumer demand and monitoring of communication have put up several challenges for the Government to constantly look for strategies which should allow China to remain globally connected, business oriented and consumer friendly.

Till almost mid-nineties the telecommunications sector in China enjoyed the monopoly of the Government having an exclusive ministry known as MPT (Ministry of Posts and Telecommunications) devoted to entire regulation and operation in the country. It functioned both as a regulator and an operator. China Telecom, one of the biggest State-Owned Enterprises (SOEs), was managing the communication services and distribution network as the only single service provider in the entire country. Propelled by the global demand and situation, developing countries like China initiated the process of liberalization and privatization of the sector. The China Telecom having the monopoly until then was broken in 1994 and another organization known as China Unicom was founded. China Telecom was separated from the MPT. Further, a set of organizations were created to provide value added services to the wide ranging demands of the consumers.

In almost two decades since 1994, the telecommunications sector in China has undergone a sea change. From a completely state controlled regulated and operated sector, it has moved towards liberalisation and privatisation of the sector by introducing structural adjustment and institutional changes.

Telecommunication service is considered in many countries, but more so in China as an important infrastructural service provider, hence endeavours to make available with world class service facilities at reasonable and affordable prices were always a challenge. To ease the pressure, China had made commitments in the WTO to open up its sector. It assumed foreign investor's entry and contribution will be a 'push factor' in developing a long-term sustainable efficient system which will help its economy with more growth potential and remain a 'key national industry'. Key national industry because it performs a dual role; first as a key independent service industry in itself; and second as a critical support element for other service industries like financial and insurance services.

In view of this backdrop, the paper attempts to locate how the telecommunication service sector has performed after China joined the WTO. Section 2 explains in detail how the sector has evolved with China's accession to the WTO. Section 3 analyses the implications of the WTO's services commitments on China. It analyzes the issue of foreign direct investment (FDI), its

¹ Statistical Yearbook of China 2013, available at http://www.stats.gov.cn/tjsj/ndsj/2013/indexeh.htm last accessed 10 May. 2013

restrictions and impact on the sector. It also looks into the aspect of regulatory independence and transparency in the system. Section 4 concludes the major findings.

2. TELECOMMUNICATIONS SECTOR IN CHINA SINCE 2001

The telecommunications service industry in China traditionally remained a closed unit, minutely monitored and tightly controlled by the Central government. It has been shielded from any external influence or foreign investment in basic services.² With accession to the WTO, this highly protected industry was finally exposed to foreign competition. According to the China-US WTO Agreement³ signed on November 15, 1999, after China enters into the WTO, foreign firms could take 50% ownership of value-added services in two years and 49% for mobile and fixed-line services in five and six years, respectively.⁴ In addition, China has accepted the principles of the WTO Reference Paper and made commitments to implement procompetitive regulatory policy in the telecommunications sector and to establish a WTO consistent legal and regulatory framework for its telecommunications industry.⁵

As a milestone in the telecommunications reform and pledge to respect the WTO commitments, the National⁶ government in China in 2000 declared *Telecommunications Regulations*. They contributed to meeting of the WTO standards, set out rules and regulations for competition and cleared obstacles to entry of foreign private investment in telecommunications service sector. In order to establish a free and fair competition, the National government decided to create a transparent regulatory regime by institutionalizing a government body known as Ministry of Information Industry (MII) which became a successor to the Ministry of Posts and Telecommunications (MPT) as a result of governmental restructuring in 1998. This regulatory body has been replaced by Ministry of Industry and Information Technology (MIIT) in 2008.

Thus, a new chapter was opened in China's telecommunications services. The Chinese Government's WTO commitments allowed the foreign direct investment to come into the indigenous telecom operating entities. According to the commitments, a foreign investment cap on basic telecommunications services operators was set at 25 percent in major cities and at 49

² In 1994, limited competition in wireless sector was introduced with the entry of Unicom. See Chang (1994).

³ This Agreement cleared the path for China to join the WTO. It was termed as the biggest blocking barrier for its entry. In order to access to the WTO, China must negotiate with each Member of the WTO and get bilateral agreements on market access. The negotiation with the United States is believed to be the most difficult because of the strict requirements from the United States. For more analyses about the process of China's access to the WTO, see Abbott (1998), Anderson (1997), Geest (1998), and Zhao (1998).

⁴ *The New York Times*, November 15, 1999. Also see the summary of the US-China Bilateral WTO Agreement at http://www. Uschina.org/public/991115a.html last accessed 15 May. 2013. For full text, see http://www.uschina.org/ last accessed 15 May.2013.

⁵ "White House Factsheets" available at http://www.uschina.org/public/wto/factsheet/telecomm.html last accessed 18 May. 2013.

⁶ Central and National government are the same and they have been used interchangeably.

percent in semi-urban areas allowing the Chinese government to retain control by securing more than 50 percent of ownership.

In mobile telecommunications, foreign investment allowed upto 25 percent share immediately upon accession. This share was to be allowed to rise to 49 percent after a 3-year period. For fixed network services, it was to take 5 years to reach the investment cap. The arrangement further calls for the cap to be raised to 50 percent after 2 years for value added services and paging services. The foreign investment cap also applied to the internet service providers. Detailed Chinese commitments under its schedule of the GATS are given in Table 1. By the time China became a member of the WTO, its telecom sector had opened up domestically in a significant way and many major service providers like China Telecom, China Unicom, China Mobile, China Netcom, and China Jitong were competing with each other.

Table 1: China's Commitments under its WTO Services Schedule during 2001-2007

Perc	Percentage and Geographic Coverage of Foreign Investment Permitted								
		12/02-	12/03-		12/05-				
Type of Service	12/01-12/02	12/03	12/04	12/04-12/05	12/06	12/06-12/07			
Basic telecom services-fixed	0%	0%	0%	25% in Beijing, Shanghai, and Guangzhou	35% in 17 cities	49% with no geographic restrictions			
Basic telecom services – mobile	25% in Beijing, Shanghai, and Guangzhou	35% in 17 cities	No change	49% with no geographic restrictions	No change	No change			
Value-added services and paging service	30% in Beijing, Shanghai, and Guangzhou	49%in17 cities	50% with no geograph ic restrictio ns	No change	No change	No change			

Source: http://docsonline.wto.org/DDFDocuments/t/WT/ACC/CHN49A2.doc last accessed on 19

China witnessed a virtual explosion in the sector as both fixed and mobile users shot up significantly in its post accession period. By 2002, China's telecommunications exchange capacity had reached 201 million lines and mobile switching capacity amounted to 235 million lines. The total number of telephone subscribers had gone upto 388 million— with 188 million fixed users and 162 million mobile users—making China's telecommunications network the largest in the world in terms of size and subscribers. The number of wireless phone users in China had also reached 250 million by the end of 2003 (Statistical Year Book of China, 2005). China was not only regarded as a market for service providers but also as a manufacturing base for telecommunications equipment. Increase in subscribers had resulted in the expansion of domestic manufacturing industry. Demand for value added services by consumers led to constant upgradation in industry, which had forced China to look for state-of the-art technology.

2.1 Analysis of Telecommunications Services Growth

China operates one of the largest telecommunications networks in the world. With 215 million telephone lines in the world compared to 186 million in the US and around 42 million telephone lines in India in 2002 at the time of its accession to the WTO, it has seen a big jump in expanding its network over the last few years. Within a span of nine to ten years the expansion of the industry has gone up by almost four times (China Statistical Year Book, 2011).

Recent trends showed that the mobile phone industry in China has also experienced a substantial rise in its sales. Driven by a growing number of handset users, increasing component prices for handsets, and a wider range of services bringing more value to customers, the market touched 4.7 billion Yuan in 2008 and 5.56 billion Yuan in 2009, according to the CCID Consulting⁸ blue paper. The paper suggested, "The key driver is value-added services," (Xinhua 27 June 2007 p. 9). Special services like accessories, music downloads or mobile TV represented only 2.5 percent of China's after-sales service market in 2004, but rose to 18.2 percent in 2006. The blue paper showed that more than 40 percent of handset users wanted to watch handset TVs and a similar percentage were keen to download music into their handsets. "In half of our authorized maintenance stores, the income from value-added services has already surpassed the fees earned for repairing handsets," said Li Jianquan, Executive Director of Quality, Service and Administration of Lenovo Mobile. "In some stores, the ratio reaches 67 percent," he said. "When customers come in to get their handset repaired, they might opt for a sophisticated new handset component like a high-definition colored screen," Jiang observed (http://english.cri.cn/3130/2007/06/27/262@242972.htm).There are now 487 million handset users in China with six million new users being added every month, according to the MII. According to the Ministry, the number is expected to reach 600 million by the end of 2010.

Ministry of Information Industry (MII) statistics as of April 2002. Available online: www.mii.gov.cn/mii/hyzw/tongjiziliao200203.htm last accessed 19 May.2013

⁸ A joint stock limited company incorporated in the People's Republic of China with limited liability.

Though telecommunications growth was hit by the global financial crisis since 2008, current statistics provided by MII suggest that growth has witnessed a rise. According to latest statistics provided by MII in 2009, China's telecom industry achieved accumulated revenue of 2.5 trillion Yuan, a year-on-year increase of 14.4 percent; and it reached operating revenue of 870.7 billion Yuan, a year-on-year increase of 4.1 percent. For various telecom sectors in China, revenue from the mobile communications network business increased by 13.2 percent year-on-year to 509.09 billion Yuan, accounting for 60.4 percent of total revenue from main businesses; revenue from fixed line local network business declined by 14.4 percent to 135.68 billion Yuan, accounting for 16.1 percent; revenue from long-distance call network business decreased by 5.3 percent to 98.26 billion Yuan, accounting for 11.7 percent; and revenue from data communications network business increased by 0.3 percent year-on-year to 99.4 billion Yuan, accounting for 11.8 percent. In 2009, the number of China's total landline and mobile phone users increased by 79.467 million to 1.061 billion from 2008. The number of fixed line users decreased by 26.671 million to 314 million in 2009; and in the same year the number of mobile phone users increased by 106.138 million to 747 million. In addition, the number of broadband users in China increased by 20.347 million to 103.226 million in 2009 (China Statistical Year Book, 2010). China is consistently noticing an increasing trend in terms of its mobile growth. In September 2013 it registered about 1206 million users which have risen to 1272 million in September 2014, whereas its number of landline users have declined touching about 278 million in 2012 from 312 million in 2010 (China Statistical Yearbook, 2014)

According to Prof. Andong Zhu, Tsinghua University, Beijing "prospects for telecom exports (equipments) during this global financial crisis look more promising than other manufacturing products. As China is a manufacturing engine for world economy, it will be able to produce quality telecom products at a cheaper price in the world with new innovations required for value added service. Major winner has been the Huawei Technology. It has exported many telecom equipments like modems to India and other developing countries. FIEs in China have also contributed nearly 60 percent to this growth and it is estimated that their contribution would rise further in future."

It is also analyzed from that the number of Urban Household Telephone Subscribers during the year 2005 was 172 million. In the year 2006, the number rose and had reached the 176 million mark. In the year 2007, the number decreased to 169 million. The number of rural fixed telephone subscribers during the year 2005 was 110 million. It increased in the year 2006 and had reached at 116 million, showing an increasing trend to the tune of 6 million, and it further went up by 1 million to reach 117 in 2007. The number of rural household telephone subscribers during the year 2005 was 100 million. It further increased in the year 2006 and had reached the 105 million mark. There was, however, no increase in this category in 2007 (Statistical Yearbook of China, 2008).

The growing number of subscribers during the year 2006 created more business, and the ministry's projection of the telecom business income in 2006 reached more than 700 billion

Yuan (US \$ 86 billion). During the 10th Five-Year Plan period between 2001 and 2005, China's telecom business income grew by an average 13.4 percent annually, with 100 million new subscribers every year. China has the world's largest number of phone subscribers, both for fixed-line and cell phones.⁹

From the available data in Table 2, it is clear that the telecommunication services sector over the next seven years especially after its accession to the WTO in 2001 performed better. The total business volume of Post and Telecommunications in 2001 amounted to 4.55 billion Yuan, and reached to 5.69 billion Yuan in 2002. The volume further increased to 9.71 billion Yuan in 2004 and showed a continuous increase, registering 23.6 billion Yuan in 2008 (International Telecommunication Union). The Number of mobile subscribers went up gradually. In 2001 at the time of accession, China had 145 million mobile users, one of the highest in the world. It experienced a significant rise in the year 2003, when it registered 269 million mobile users compared to 206 million in 2002. Between 2003 and 2004 and between 2004 and 2005, the rise is also significant as in 2004 it touched to get 334 million in 2004 and recorded 393 million in 2005 (Appendix).

Table 2: Basic Conditions of Post and Telecommunication Services during 2001-2010

Basic conditions of post and telecommunication services during 2001-2010									
Item	2001	2004	2006	2008	2009	2010			
Business Volume of Postal and Telecommunication Service (100 million Yuan)	4556.26	9712.29	15325.9	23649.5	27193.5	31978.5			
Number of Mobile Subscribers at Year- end (10000 subscribers)	14522.2	33482.4	46105.8	64124.5	74721.4	85900.3			
Local Telephone Subscribers at Year- end (10000 subscribers)	18036.8	31175.6	36778.6	34035.9	31373.2	29434.2			

⁹ MII 2006.

Local (Urban) Telephone Subscribers at Year- end (10000 subscribers)	11193.7	21025.1	25132.9	23155.9	21190.0	19658.1
Rural Telephone Subscribers at Year- end (10000 subscribers)	6843.1	10150.5	11645.6	10880.0	10183.2	9776.1
Number of Post & Telecommunications Offices (Unit)	57136	66393	62799	69146	65672	75739
Length of Postal Routes and Rural Delivery Routes (10000km)	659.53	686.70	693.6	735.0	770.4	832.6

Source: Stats. Gov. cn last accessed 23 June. 2013.

- a) The business volume of postal and telecommunication services before 2000 was calculated at 1990 constant prices and that in 2001 was calculated at 2000 constant prices. The rate of increase at constant prices was 27.6 % in 2001. The same applies to the table following.
- b) Statistical coverages of business volume of postal and telecommunication services and pieces of express mail services are China Post Group before 2006, and postal enterprises above designated size (with annual business revenue above 2 million yuan). The same applies to the table following.
- c) The indicator of number of postal offices referred to postal and communication offices before 1998, and referred to postal offices from 1999 to 2010; it included postal offices and postal sub-stations since 2002, and was postal enterprises above designated size since 2007.

In 2008, it further increased to register 641 million. Similarly, local landline telephone subscribers also witnessed a rising trend. It registered 180 million in 2001 and rose significantly to reach 214 million in 2002. The number further increased to 311 million in 2004 and 350 million were finally registered by 2005 end. In 2008 the number of local landline subscriber came down, registering 340 million. This has happened due to consumers shifting to mobile

phones. Local (urban) telephone subscriber numbers experienced an upward trend consistently from 111 million in 2001, and went up to register 239 million in 2005. It witnessed an increase in 2006 reaching 251 million, but in 2007 and 2008 the number has come down to touch 248 and 231 million respectively (Appendix). Likewise from the table, it is evident that other indicators like rural telephone subscribers, and number of post and telecommunications offices (PTO) witnessed some fluctuation in growth (Appendix). Table 2 shows there has been a continuous increase in business volume of postal and telecommunication service; number of mobile subscribers and there has been fluctuating trend in urban landline telephone subscribers and rural landline subscribers. Currently, China is the fastest growing telecom sector in the world registering more than 1 billion subscribers and China Mobile is the largest service provider in the world. According to the Ministry of Industry and Information Technology (MIIT), "The number of Chinese mobile phone users topped 1 billion by the end of February 2012. The MIIT said in a statement posted on its website that the total number of mobile phone users increased by 20.67 million during the first two months this year to hit a record high of 1.01 billion. The number of 3G mobile phone users rose by 15.5 million in the first two months of 2012 to reach 143.92 million. During the same period, the number of fixed-line telephone users dropped by 828,000 to 284.29 million users." ¹⁰ On the whole the telecom service sector remained buoyant and growth oriented.

2.2 Compound Annual Growth Rate (CAGR) Analysis¹¹

In 2001, at the time of accession, China had more than 180 million landline telephone users which reached to 367.7 million in 2006 showing a compound annual growth rate (CAGR) of 15.3 percent. Similarly in 2006, landline phone users per 100 inhabitants were 27.79 percent compared to 14.06 percent in 2001, registering a CAGR of 14.6 in 2006 over 2001 (Table 3). It can be also observed from the Table 3 that the percentage of CAGR registered at 15.3 percent during the period 2001–2006. However, calculation based on sourcing data from the International Telecommunication Union (2007), it was observed the percentage of CAGR during 2000-2005 stood at 19.3 percent which suggests a decline in the growth of mainline telephone in China. There has been a significant decline in terms of mainline telephone services in China possibly due to growth in mobile services. China also experienced like the other countries in the world, a mobile revolution making its telecom sector to grow as one of the fastest in the world.

Table 3: China's Main Telephone Lines (CAGR %) (2001-2006)

	Year	Main	CAGR %	Main	CAGR % (2001-
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10 Xinhua News Agency 20 April. 2012. news.xinhuanet.com/english/last accessed 15 June.2013

¹¹ Compound Annual Growth Rate (CAGR) Analysis during the period 2001-2006 is taken into consideration because this period was the most restrictive phase of China's WTO agreements on telecommunication. After China joined the WTO in a span of 5 years it was supposed to phase out all its restrictions. This exercise was undertaken to give a perspective on the growth of the sector.

	Telephone	(2001-2006)		Telephone	2006)
	lines (In 000')			lines per	
				100	
				inhabitants	
2001	180368	15.01	2001	14.06	14.6
2006	367786	15.31	2006	27.79	14.6

Source: International Telecommunication Union 2007 www.itu.int last accessed 9 July. 2012.

Table 4: China's Mobile Cellular Subscribers (CAGR %) (2001-2006)

Cellular Mobile Subscribers (in 000')							
Year		CAGR % (2001-2006)	Year 2006				
2001	144820	26.1	Per 100 inhabitants	% Digital	As % of total telephone subscribers		
2006	461058		34.83	85.3	55.6		

Source: International Telecommunication Union 2007 www.itu.int last accessed 9 July. 2012.

Table 4 indicates that the growth of cellular mobile subscribers in China witnessed an upward swing after its accession. China registered 144 million mobile users in 2001 and 461 million in 2006. It had about 55.6 percent of mobile users out of total telephone subscribers in 2006. It can also be observed from the Table 4 that a CAGR of 26.1 percent was noticed in 2006 (World Telecommunications Development Report, 2006, International Telecommunication Union).

2.3 Telecom Industry during 2007-10¹²

During this period most of the restrictions on the entry of foreign players to domestic market were supposed to be withdrawn. Around 2007–08, the telecom industry witnessed new dynamics in relation to resource distribution and development trends. On one hand, the mobile businesses grew fast while on the other, the landline businesses rapidly declined. Decrease in landline venture resulted in low economic benefits for the economy. As a result, the gap between enterprises at different levels increased and the competition dynamics in the market lost their balance. During May 2008, MII, the National Development and Reform Commission and Ministry of Finance decided to further restructure the telecom industry. The six major telecom operators were reshuffled to three, to improve the performance of the industry. The

 $^{^{12}}$ The period 2007-10 is analyzed to show if any further change or opening up did take place in China's telecommunication service sector.

three major players were China Telecom, China Unicom, and China Mobile, and each one of them is involved with mobile, landline and broadband (*China Daily*, May 25 2008 p. 8).

The current telecom industry in China looks promising as gradual and marginal phase out of restrictions have taken place. The foreign telecom players, who have been waiting for a long time to serve the Chinese telecom market were now considering giving shape to their plans of entering the world's largest and highly lucrative telecom industry. Various foreign players such as SK Telecom of South Korea and Telefonica (the second largest phone company of Europe) already enjoyed substantial stakes in China's fixed-line operations, China Telecom and China Netcom. 'Restructuring of the Chinese telecom industry would give these players an opportunity to bring their mobile business to the country as the domestic partners now have access to the country's wireless market,' says a telecom analyst. ¹³ This sentiment was also expressed by other Chinese experts (Zhu and Guoxing 2009: Personal Interview). For instance, SK telecom, which held 6.61 percent of China Unicom's total equity before the telecom industry reorganization sought suitable opportunities to raise its stake in the company.

As if to reward these moves, the Chinese government announced in September 2008 that it would relax access to its telecom industry for foreign investors by cutting minimum investment criteria by as much as 50 percent. It is expected that deregulation by the government may trigger an influx of foreign investment in the Chinese telecom sector. The Chinese Government took up the initiative to finalize issuance of 3G licenses in January 2009, which had opened up new avenues for foreign players, to venture into the market as the market which was expected to create huge demand for capital among the Chinese telecom operators. These companies are actively expanding and upgrading their existing networks in order to gain a favorable position in the country's most promising 3G environment.

3. IMPLICATIONS OF SERVICES COMMITMENTS ON CHINA

Unlike GATT, the mandate of the WTO included the services sector. With the introduction of General Agreement on Trade in Services (GATS) ¹⁴ in 1995, the growing importance of services sector has assumed significance. As data and literature on post-accession are quite sparse on China's services sector, the component of analysis becomes limited on the issue. A significant work done by Ianchovichina and Martin in 2001 (Mattoo 2003, p. 303) taking into account the market access and national treatment commitments, says that the coverage of market access commitments (the unweighted average count) was 57.4 percent. Table 5 gives an idea about the analysis done in this study.

¹³ From the discussion held at a business meet organized by the CII and Embassy of India, Beijing at the Marriot hotel in Beijing on April 15 2009.

¹⁴ Detailed provision relating to GATS can be accessed from http://www.wto.org/english/docs_e/legal_e/26-gats_01_e.htm

Accession commitments in China are much higher than the commitments offered by any other group of countries including high income countries in the Uruguay Round. The 'average coverage' a measure of coverage that better reflects the extent of liberalization of services was 38 percent for China, which shows more openness about the sector compared to other high income group countries. The share of completely liberal commitments (no restrictions) in the maximum possible commitments was 23 percent for China, much higher than that of any other group of developing countries but somewhat lower than that of high income countries. From this, one can easily observe that China's commitments towards national treatment are wider and deeper than many other groups of countries.

Table 5: Coverage of Specific Commitments during Late 1990s (%)

	High- income countries	Low and middle-income countries	Large developing nations	China
Market access				
Unweighted average count (sectors-modes listed as a share of maximum possible)	47.3	16.2	38.6	57.4
Average coverage (sectors-modes listed as a share of maximum possible, weighted by openness or binding factors)	35.9	10.3	22.9	38.1
Coverage/count (average coverage as a share of the average count)	75.9	63.6	59.3	66.4
No restrictions as a share of total offer (unweighted count)	57.3	45.5	38.7	40.2
No restrictions as a share of maximum possible	27.1	7.3	14.9	23.1
National treatment				
Unweighted average count (sectors-modes listed as a share of maximum possible)	47.3	16.2	38.8	57.4
Average coverage (sectors-modes listed as a share of maximum possible, weighted by openness or binding factors)	37.2	11.2	25.5	45.0
Coverage/count (average coverage	78.6	69.1	66.1	78.4

as a share of the average count)				
No restrictions as a share of total offer (unweighted count)	65.1	58.0	52.3	63.5
No restrictions as a share of maximum possible	30.8	9.4	20.2	36.5
Memo item				
No restrictions on market access and national treatment as a share of maximum possible	24.8	6.9	14.3	29.8
Number of sectors committed	293.0	100.0	239.0	356.0

Source: Mattoo (2003) p. 303

The schedule of commitments towards market access and national treatment that China made while entering into the WTO are very significant. A closer look at those commitments sector by sector reveals that for most sectors modes 1¹⁵ 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 to managers, corporate executives, and specialists defined as senior employees of a corporation of the WTO members being engaged in the foreign invested enterprises in the territory of the People's Republic of China for conducting business. They may be granted a long-term stay permit as stipulated in the terms of contracts concerned or an initial stay of three years, whichever is shorter (Report of the Working Party, 2001). No commitments are made regarding other categories of movement of natural persons, for example unskilled personnel or movement not linked to commercial presence. With regard to mode 3, dealing with commercial presence, the official policy of China today even puts into effect a lot of restrictive measures. These are as follows:

Form of establishment: foreign enterprise can make an entry to China on specific sectors in two ways. The typical restriction is the requirement to form a joint venture; 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) or majority ownership (50%) or full membership. The foreign equity limits included in China's GATS Schedule, and China's strict accordance with those limits, mean that no supplier of telecommunications services through commercial presence in China can be 'owned' by persons of another Member, and few are likely to be 'controlled' by such persons. ¹⁶Geographic scope: Commercial activity may be allowed only in specified cities, for example in Shanghai or Shenzhen or in special economic zones. Business scope: Transactions may be permitted only

¹⁵ Cross-border supply under mode 1 formed the subject of the only WTO dispute to date on telecommunications services, which involved a challenge by the United States to Mexico's telecommunications regulation.

¹⁶ GATS, art XXVIII: n (i), (ii).

with a subset of consumers or restricted in some other way. Regulatory requirements: Foreign firms may be required to have certain amount of assets and be established as a representative office for a certain period of time before commencing full business operations.

According to this specific schedule of commitments, FDI in joint ventures will not exceed 30 percent in specific cities such as Beijing, Shanghai, and Guangzhou. Within one year after accession, this geographical area will be extended to Chengdu, Dalian, Fuzhou, Nanjing, and others. One year after accession, foreign investment up to 49 per- cent¹⁷ will be allowed and within two years up to, but not more than, 50 percent. The above geographical restriction will be lifted within five years from the date of accession. 18 The telecom services will include value added services such as voice mail, electronic mail, online information and data base retrieval, internet content, etc. These were the commitments made by China when it entered the WTO. While the five-year "roadmap" for implementation of its scheduled market opening ended in December 2006 with most of the commitments met, some key commitments in sectors important to the US economy still have not been fulfilled (US-China Business Council).

Similarly, on the issue of national treatment it had not committed any limitation which signifies that the foreign invested enterprises and domestic players will have no discrimination in terms of treatment in the country. That also amply demonstrates that it wanted to encourage foreign players to come in, but in a gradual and geographically restricted manner.¹⁹

In the services negotiations under the GATS framework countries make offers and request to achieve their specific schedule of commitments. These commitments are made at the time of accession to the WTO. The idea is this that when the negotiations at multilateral level were proving to be difficult to reach its desirable end, countries resorted to offer-and-request mechanism. China did the same thing in 2005 when it revised its offers²⁰ in a range of services in anticipation that this process or initiative would ease the negotiations to reach its final end. The revised offers in China's telecom services suggested that the foreign service suppliers will be permitted to establish joint venture in value added telecommunications enterprises without confining to 30 percent equity and restricting to cities like Shanghai, Guangzhou and Beijing. Similarly, in other services such as on-line information and/or data processing, foreign investment in the joint ventures shall be no more than 50 percent. This is to suggest that with three to four years of accession China proceeded with its liberalization commitments in telecom services. This in a way was expected of China to do it because it had promised to remove such kind of restrictions and also became keen to liberalize the sector.

3.1 Implications during Restrictive Phase as Agreed under Accession Process to WTO (2002-2007)

¹⁷ GATS Schedule, 16-19 (telecommunication services, mode 3); FITE Rules, Art 6.

¹⁸ WT/MIN (01)/3/Add.2 WTO Ministerial Conference Fourth Session Doha, 9-13 November 2001, p. 17.

¹⁹ Ibid, p: 17.

²⁰ TN/S/O/CHN/Rev.1 29 July 2005, WTO.

China's opening up of the telecommunications sector in a gradual and phased manner to foreign players was seen both as an opportunity as well as a threat. The Central Government was extremely cautious in allowing market access to foreign players. After joining the WTO, China, as a matter of principle, had to open its sector. For a long time restrictions in the form of commercial establishment have been prevalent in China and being justified as a source of acquiring technology or obtaining a share of monopoly rents. All such restrictions slowly apply to the forms of establishment. Restrictions of these kinds mentioned in the WTO agreement which confine foreign ventures to five cities for five years as in the case of insurance, will encourage agglomeration of these activities in the favoured cities, which will be difficult to reverse when the restrictions are subsequently lifted. Such kind of restrictions will have a rather adverse impact on the rural areas of the country even if they have the potential or the comparative advantage of the designated urban areas. Policies of liberalisation towards telecom services pursued geographically was at one level a conscious decision of the Central Government because it knew in such pockets the rising purchasing power and developed infrastructure will be able to sustain such telecom growth and consumers' demands will also be met (Xiangshuo 2009: Personal Interview). It is also the pressure of the domestic telecom lobby, which exerted immense pressure on the Government not to liberalize the telecom policy and allow the foreign players to come in. Though consumers complained because of poor service and high tariff structure, the Government had imposed during this period hardly addressed such concerns. The Government benefited from such policies as it obtained hefty revenue directly from the telecom sector (Xiangshuo 2009: Personal Interview).

China's telecom liberalisation is delayed due to vested interests of various interest groups. These groups are domestic telecom operators like the China Mobile, China Telecom and China Unicom who never wanted an early opening up of the sector. Though the commitments made by China in the WTO were regarded, yet the Government took five to six years to phase out most of the restrictions for foreign players to enter the Chinese market. This kind of market restrictions which remained after the accession till 2007 were supported by the Government as it provided lead time to the Government to gauge the impact of telecom liberalization in the country (Lei 2009: Personal Interview).

3.1.1 Positive Impact

China's late entry of telecommunications in world trade is justified as it is a developing country and its domestic industry is not strong enough to face the global competition. Being a strategic sector, the Government may retain its control over the sector. Implications of late opening might not have been profitable for the Government, but the issue of security has never been compromised (Sang Ho 2009: Personal Interview). According to Prof. Hong Song: 'Chinese domestic firms were not very strong in terms of their infrastructure, innovation and service. As a result there was intense pressure from the industry lobby not to open up the sector. The Chinese Government respected their concerns' (Song 2000, p. 14).

According to Prof. Andong Zhu, Tsinghua University, Beijing, China: 'When pressure on China mounted as China was negotiating for its entry into the WTO, it decided to open up its telecommunications sector in a phased manner confined to a few cities initially as it wanted to realize the impact of such liberalization policies. Telecom remained a closed sector for political reasons. It is also argued that the Chinese Government wanted to experiment the system of opening up on a selective geographical pattern. The Government was fully aware that such pockets had the purchasing power and initial development of telecom infrastructure will generate revenue for the Government.' So the geographical opening up the sector and, precisely in a few select areas was a conscious decision by the National government to also take into account the affordability of price mechanism. Initial competition in Chinese market remained virtually an urbanized phenomenon, where more and more people were interested to pay higher price to access service by the foreign service providers. According to Prof. Andong Zhu: 'such restriction of service never created any division among the rural folk and urban dwellers; rather it helped the Government to protect its domestic industry and allow the competition to slowly enter the market.' Implications of this opening up in a phased manner have not put the Government in any jeopardy as far as social and political security is concerned. As a part of the overall WTO's accession commitments, China had to open up and remove its restrictions on foreign players' entry. With the liberalization and FDI coming into the sector, the employment prospects have naturally gone up. In fact, the telecom sector is providing more employment currently than textiles. During this current financial crisis, the prospects for performing better lay more with the telecom compared to textiles (Zhu 2009: Personal Interview).

The overall accession commitments led to some amount of dilution of discretionary power of the Chinese Government as it fulfilled most of its commitments over a period of five to six years from the date of its accession. It has eliminated all its restrictions relating to foreign entry and foreign ownership. It will observe strictly national treatment, which basically means it will stop discriminating between trading partners and not even favour its own domestic firms. In totality, it vows to follow a free and fair rule-based trading system. What China is going to lose most importantly in the wake of all these developments is its freedom to exercise its own policies at any point of time. The commitments are all desirable but how far the continuous restrictions on foreign entry and ownership will help China to have full benefits of foreign investment is an issue that needs to be debated. The commitments try to eliminate discretion existing in the system. It is a matter of fact that liberalization in many areas is taking place in China slowly because the Chinese government is reluctant to liberalize certain areas.

Socio-economic factors and political pressures from various quarters hold them back and as a result protection still continues. The government even feels certain incumbent domestic enterprises or suppliers are unable to cope up or face the challenges of liberalization as the reforms in these may take longer for them to fight back. All these may lead to some form of protection and once protection is given will be difficult to lift it.

In addition, entry through joint venture looks to be a positive step for the foreign firms. Initially they can collaborate with a local firm as the firm will have the minimum assets and they will find an access to operate in China. However, binding ownership restrictions will affect the firm's performance because the firm will not be in a position to obtain new technology and better manpower to raise its performance.

3.1.2 Negative impact

Though China has agreed to remove all restrictions on foreign entry, the Government feels somehow ambivalent about the nature and scope of foreign entry. What is uppermost in the Chinese Government's mind is whether unrestricted regime will be good for China and to what extent, it is going to devalue the total control of the Chinese government on this issue. One reason could be that unrestricted entry of foreign companies may just completely swallow the Chinese market, as the domestic firms are not so well developed or well equipped in terms of providing better services at such a lower cost. Another reason is the issue of economies of scale. For example, in a vibrant services sector like telecommunications, if one domestic firm has worked out substantial fixed costs of networks, competitive bidding by foreign entry could lead to some kind of an inefficient network duplication (Armstrong, Cowan and Vickers 1994, p. 42).

In a technologically driven world, technology can even minimize the cost at some level. Openness in the system allows a country to have better technological leverage as to how a country can stop all these and go ahead with its old sterile and obsolete technology. The power and spirit of competition is yielding much better results.

Besides, entry restrictions do not develop a sense of competition among the local firms or incumbents; rather it creates an atmosphere of complacency or sometimes leads to collision, which ultimately results in unproductivity and inefficiency. More importantly, sometimes even the regulator is not adequately placed than the competitive system to derive the number of firms operating in the market and as to how they are being priced to produce or provide the best possible services. All this suggests that China may not worry to open up its sector or restrict foreign entry.

However during a field trip to China in 2009 it was largely felt by the author as he made few interactions with the Chinese consumers²¹ regarding the restriction of the market has suggested that ISD calls have become very expensive with the majority of the domestic players in the market. Price sensitivity and faster and better service network and connectivity to the outside world have created frustration among the Chinese people and these societal concerns have been largely ignored in the best interests of the national security and sovereignty.

²¹ Mobile SIM card shop owners, shopkeepers, corporate executives, academicians and researchers based in Dalian, Shanghai and Beijing

Excessive capitalisation requirements to the tune of 2 billion Yuan in the telecommunication sector as a part of the China's regulations for foreign invested telecommunications enterprises proved an entry barrier for foreign telecom investors. As a result to develop an economically viable and efficient telecommunications services market in China had become difficult. This kind of restriction inhibited investor to turn to the Chinese market for future investment. However with the gradual liberalisation in the sector, the capitalization requirement had significantly come down to RMB 1 million in Basic Telecom Services (BTS) by 2008²² under severe pressure form the US.²³ However these minimum capital requirements are a common regulatory tool in China, (Crosby 2007) and they are included in China's GATS Schedule in a number of sectors, such as travel agency/tour operator services, 24 but not in the field of telecommunications. They are normally not found in other members, telecommunication service markets.25

For many successful foreign enterprises such huge capital requirements for commercial purposes were never a practice and to invest so much in developing infrastructure in a different country initially did not look a very profitable proposition. Such policy doesn't make positive contribution to a domestic infrastructural service like telecommunications especially at a time when the global telecom sector is facing huge capital resource crunch.

China's huge capitalisation requirements were also inconsistent with the licensing practices of other liberalizing economies. A global review of the start up capital requirement for a basic service provider found no amount of capitalization fee in the US, the EU, Canada, Japan, Australia, Brazil, Chile, Argentina. Hong Kong requires a performance bond; India requires a bank guarantee from US \$ 5 million to US \$ 80 million depending on geographic scope. It is only Taiwan which maintains a rigid policy like China (Brilliant, M. and Waterman, J., China's WTO Implementation: A Three Year Assessment Report, 2004). This high capitalisation policy had restricted the movement of foreign service providers entering China. The policy also discouraged the foreign companies to engage in any joint venture with a Chinese partner. China's high capitalisation requirement for basic telecommunications services has limited its market access.

Another negative impact is visualized in terms of having a choice of partner to enter into the Chinese market. BTS suppliers whether domestic entities or foreign invested telecom enterprises (FITEs) must be 51 per cent State-owned. This effectively limits the foreign

²² Decision on Amending Provisions on Administration of Foreign-Invested Telecommunications Enterprises, State Council Decree No 534 (promulgated and effective 10 September 2008) part II.

²³ USTR, Report to Congress on China's WTO Compliance (December 2008) 90; USTR, 2009 National Trade Estimate Report on Foreign Trade Barriers (2009),p. 112.

²⁴ GATS Schedule, pp. 36-37.

²⁵ WTO Council for Trade in Services, Report of the Meeting Held on 23 September 2005: Note by the Secretariat, S/C/M/80 (17 October 2005) [37] (evidence presented by the United States); USTR, Report to Congress on China's WTO Compliance (December 2009),p. 99

ownership of paging service to 49 per cent. The 51 per cent State-ownership requirement also means that any other BTS supplier achieving the maximum foreign equity of 49 per cent as allowed in China's GATS Schedule must partner with a wholly State-owned company. Even achieving a lower level of foreign equity would require majority State-ownership of the Chinese partners overall. This State-ownership requirement therefore significantly obstructs the entry of FITE and reduces their choice in securing a Chinese partner to establish an FITE. ²⁶ In effect, it also grants China's discretion in determining whether to allow a given foreign supplier to establish an FITE, because the State owns the potential Chinese partners. Practical wisdom therefore in a way suggests how important it is to be connected with the State. In practice, it seems according to Irene Wu, (2009: 60) '[o] nly firms that have the support of the State Council and its ministries may enter the market'.

This policy adopted by China dissuaded many foreign enterprises to enter the market. As a result, China suffered from developing its telecom sector as a modern, productive, and sophisticated sector. It lost the opportunity of getting sophisticated technological services and other managerial expertise into the sector, which in turn would have helped China in the diffusion of knowledge and make the economy more efficient. Lack of access to better services remained a bottleneck for the whole industrial sector. Such restrictive policy did not help the consumers. This policy remained active for the first three years of accession and slowly such restrictions were lifted in the interest of the economy.

Such restrictions proved to be disadvantageous for the country as well as for the consumers and were also not in conformity with the commitments of the accession process. Restriction on foreign ownership was proving to be a major hindrance in the liberalisation of trade services in China. There was only one way in which foreign presence in China can be administered, i.e., entry through a joint venture with varied degree of limits on the extent of foreign ownership. China has undertaken a series of reforms in gradually phasing out those restrictions but still in the areas of life insurance and telecommunications, such restrictions persist.

Besides, the policy of geographical limitation followed after China joined the WTO in terms of opening up of certain major cities like Shanghai and others to foreign players and limiting to rest of the country, greatly impeded China's uniform growth in the telecom sector. As a part of China's own commitments to the WTO, this policy of geographical limitations may have widened the intra-regional disparities. Though China was committed to phasing out of geographical restrictions, sequential approach to this kind of liberalization may prove even more damaging in the long run. The existing pockets of development are going to witness even more progress as more economic activities are going to be concentrated in these areas. This would even widen the scope of intra-regional inequality. With due course of liberalization occurring in the hinterland at a later stage, there is a doubt whether hinterland economy will be

²⁶ WTO Council for Trade in Services, Report of the Meeting Held on 5 November 2009: Note by the Secretariat, S/C/M/96 (13 November 2009).

able to adjust to the pace of progress that had occurred in the coastal belt. Inequality may thus continue to persist. These lacunae should be able to strengthen its case for lifting the geographical restrictions simultaneously rather than sequentially.

3.1.3 Economic and Political Hurdles for Opening Up

China's policy relating to restrictions on foreign ownership continues to be dominated essentially for two reasons—economic and political. Economic reason can be attributed to the fact of extending limited ownership by which foreign companies will be able to ensure efficiency-cum enhancing cost and services factor, whereas political reason implies that there is a huge adjustment cost involved that an immediate transfer of an ownership would lose control of the firm, which ultimately could lead to layoffs. This picture is well known to the Chinese Government and they visualize a major social backlash. But the liberalization on the other hand promises to provide better service by not developing a monopolistic scenario rather than bringing in a competitive system by introducing competing firms to provide quality service.

The above analysis gives an idea about the fact that accession commitments and its fulfillment are beneficial for a country like China. With its size, and a huge burgeoning middle class having a strong purchasing power, with great amount of infrastructural development and an earnest drive towards modernization, China can achieve spectacular success from this on-going liberalization process. If it is to make the most of liberalisation that it had committed to after becoming a WTO member, then it has to put its independent regulatory network in place. China has not so far implemented its WTO Reference Paper commitment to establish an independent regulator.

The Chinese Government still owns and controls all major operators in the telecommunications industry, and the MIIT still regulates the sector. To create an independent regulator, China requires a series of reforms to be undertaken in the immediate future like establishment of a professional body that is separate from, and not accountable to, any basic telecom supplier. The body should be capable of issuing impartial telecom decisions and rules. Specifically, it is important that the regulatory body adopts transparent procedures for drafting, finalizing, implementing and applying regulations and decisions. It must take appropriate measures consistent with the WTO Reference Paper, to prevent dominant suppliers from engaging in, or continuing with anti-competitive practices. It must set up an independent and objective process for administrative reconsideration of its decisions and appropriate procedures and authority to enforce China's WTO telecom commitments such as the ability to impose fines, order injunctive relief, and modify, suspend, or revoke a license. As the services sector is dynamic and rapidly growing, a strong, flexible domestic regulatory body is very much essential to tackle certain key issues like destabilization in the market, asymmetrical and inadequate consumer information, developing monopolistic tendencies, and guarantee fair and equitable access (Kanungo 2005, p. 344).

The first regulatory reform should come in the area of physical infrastructure like roads and railways for land transport and other specialized distribution networks, like cable and satellite telecommunications (UNCTAD and World Bank, 1994). Unless a thorough regulatory mechanism is created, the market is going to witness some disturbance as the incumbent may not allow competition to set in and deny the competitors access to essential facilities.

Second, as services markets in China are being opened up, due importance must be given to providing consumers with the quality information in intermediate and knowledge based services. Normally in a large market, consumers may not find the appropriate information about the kind of services they are buying. For example, a consumer may not easily assess the competence of a professional such as a doctor or a lawyer or the effectiveness of a hospital or services of a transport system. Further obtaining that information from anywhere in the first place is difficult; secondly that information will prove to be expensive. In such a situation, an effective regulatory body having more autonomy and flexibility if in place can take care of increasing demand of social welfare.

3.2 Issue of FDI in Telecommunications Services

The issue of FDI in China's telecommunications services sector occupies a critical place in China's post-WTO accession period. The FDI in services virtually remained banned or extremely restrictive prior to its accession (Nolan and Wang 1999: 182). The scenario changed when the establishment of MII as the regulatory body came into existence and took measures to put in place an effective regulatory mechanism to monitor the foreign investment.

However, one of the significant reasons for China not allowing FDI in telecom services has been its deep concern towards national security and sovereignty. State control of communications network and services has long been viewed as one of the important aspects of security and sovereignty. Ideological reasons also played a role in restricting FDI in telecom services and allowed the sector to move quite cautiously (Xiangshuo 2009: Personal Interview). As Wu Jichuan explained: "The rules prevented foreigners from owning telecom; there was worry that China's security could be jeopardized" (Kuhn 2010, p. 322). It has often been observed in Asia particularly the linkage between national security and telecommunication services has been invoked as one of the main reasons for restricting the foreign ownership of operators (Janda 1999, p. 23). At the same time, the demand and ability of a country's economic growth is fully dependent on such network of services, which is also equally recognized by the country. The countries, therefore, are trying hard to balance these contradictory and functional imperatives (Drake 2001, pp. 27–28).

Countries in the 1960s and 1970s and during Uruguay Round shared the view that Western technology played a key role in enhancing their economic growth. Based on pragmatic assessment, countries realized giving up a degree of national sovereignty would result in ample dividends in terms of consumers' welfare and deployment of equipment and efficient services (Frieden 2001, p.149). In a centrally planned economy like China, telecommunications were

part of national security network and part of country's requirement to stay in touch with the country side. As a result, sovereignty and national security since 1978 till its accession to the WTO have considerably influenced China's policy on FDI in services and the broader direction of reform agenda in telecommunications.²⁷

With the accession to the WTO, the policy debate shifted from a ban to how and to what degree the foreign ownership of operators and network services should be allowed without affecting the country's national interest. Joining the WTO the Government automatically opened up the sector though the deeper issue of national security and sovereignty remained a primary concern. Recent regulations explicitly incorporate the notion of sovereignty. For example, rules governing the administration of telecommunications provide that 'when managing telecommunications construction, it is necessary to safeguard the state sovereignty in telecommunications.' ²⁸

With the accession to the WTO, several foreign enterprises have made inroads to China. Flag Telecom from Europe is the first and the only private operator, that landed a submarine telecommunication cable in China. In addition to this, in 2003 South Korea's SK telecom joined hands with China Unicom to develop the first Sino-foreign joint value added mobile service provider in China.

In compliance with the WTO agreements, China till 2004 had allowed foreign operators equity of 25 percent in basic services joint ventures. Although 18 foreign firms are reported to have applied for investment in joint ventures, the scope of investment still remained narrow (Laperrouza 2006, p.161). High capitalization requirements have acted as a huge disincentive for all these international carriers.

Besides the issue of security and sovereignty, certain other factors also attributed to the formation of restrictive policies. First, it wanted to give a free run to the MPT and thereby closed the gates of entry of FDI into China. Second, the Chinese government, like its counterparts in developing and transitional economies, wanted to protect the interests of the national domestic industry. This view is amply reflected in the work of Mueller and Tan that services market in telecommunication would remain restricted to foreign investors as long as national industrial policy and political considerations define the agenda of reforms. Third, it is believed that the sector did not provide a clear, predictable, and transparent environment for the foreign enterprises. Fourth, immediately after the accession, foreign investors were not clear about the timeline of the liberalisation of different services. Fifth, the MII acts as a conservative regulator which limits the scope of expansion in an era of openness. Sixth, they were not sure of their profit margins as the post accession period does not liberalize the sector in a speedy manner; rather it does it in a phased manner over a period of six-years.

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²⁷ Several studies have directly attributed to the conservative stance of China on FDI to the issue of sovereignty and national security. See Zhang and Peng (2000, p.14) and Xu (2002, pp. 25–26).

²⁸ Decree No. 20, jointly issued by MII and SDPC in February 2002.

Concern for national security had resulted in delaying of complete restructuring of telecommunications sector in China. It was kept under the tight state control and remained protected from foreign competition. National security and national sovereignty were of vital importance to the Chinese Government as articulated in the "Five Principles of Peaceful Co-existence." In order to ensure that these principles were abided by the Chinese domestic laws and rules in the telecommunications sector remained non-transparent and obscure (Kobayashi 2007, p. 146). However, the approach to the sector began to change when China joined the WTO. Yet, it continues to be a major factor in opening up the sector. Like many other countries issue of national security in China greatly features in telecommunications market. Security is also adequately included as a relevant consideration in China's telecommunications regulations and draft telecommunications law. Article 10 of the current regulations states:

When examining an application for the operation of basic telecommunications services, the State Council's department in charge of the information industry shall consider factors such as *state security*, telecommunications *network security*, the sustainable utilization of telecommunications resources, environmental protection and the state of competition in the telecommunications market. ²⁹

3.3 Issue of Transparency and Regulatory Independence

In relation to FDI coming into the sector, the major hindrance for the foreign investors was the issue of transparency in the regulatory system. China's regulatory framework for telecommunications is relatively opaque and difficult to understand. This opacity is most acute for those who do not read Chinese. China agreed in its accession (via paragraph 334 of the Working Party Report) to 'make available to the WTO Members translations into one or more of the official languages of the WTO all laws, regulations and other measures pertaining to or affecting trade in goods, services, TRIPS or the control of forex', at the latest 90 days after implementation or enforcement of such measures. This commitment, which builds on the general transparency obligations in GATS and the Accession Protocol,³⁰ has been described as both 'extraordinary'³¹ and 'astonishingly ambitious',³² and the WTO Secretariat acknowledged improvements in regulatory transparency in China's most recent Trade Policy Review.³³ China

²⁹ Telecommunications Regulations of the People's Republic of China, State Council Decree No 291(promulgated and effective 25 September 2000) art 12, as translated in TransAsia Lawyers, China's IT & Telecoms Legislation (Vol. III) (TransAsia, 2003), p. 285.

³⁰ GATS, Art III; Accession Protocol, Section 2C.

³¹ Julia Qin, "WTO-Plus" Obligations and Their Implications for the World Trade Organization Legal System: An Appraisal of the China Accession Protocol' (2003) 37(3) *Journal of World Trade*, p. 483, 494.

³² Donald Clarke, 'China's Legal System and the WTO: Prospects for Compliance' (2003) 2 Washington University Global Studies Law Review p. 97, 113.

³³ WTO Trade Policy Review Body, *Trade Policy Review: Report by the Secretariat – China*, WT/TPR/S/199/Rev.1 (12 August 2008), p. 24, 29. The WTO's Trade Policy Review Body conducts periodic evaluations of each WTO Member's 'trade policies and practices and their impact on the functioning of the

moved from rank 41 to rank 38 out of 48 countries in the 2009 Opacity Index, which measures corruption, legal system inadequacies, economic enforcement policies, accounting standards and corporate governance, and regulation.³⁴

One of the key challenges facing the government is the regulatory independence. Regulatory independence essentially would mean the independence from the government, industry lobby and from the consumers; essentially reflecting structural and functional independence. China claims that its telecommunications service sector enjoys regulatory independence since 1998 when it established MII and which got subsequently replaced by MIIT in 2008. It has been 'structurally and financially' separate from all telephone operators and providers which was the precondition of the Reference paper in telecommunications which China had signed as a part of its requirement to join the WTO. However, the distinction between independence from operators and independence from government remains blurred when the operators are Stateowned, as is typically the case in China's telecommunications service industry. China has identified telecommunications as one of seven 'strategically important' sectors or 'key' industry that must remain under the State control.³⁵ So much so that when an operator wishes to obtain a license to supply basic telecommunications services (BTS) he/she must 'be a lawfully established company that specializes in basic telecommunications services and in which the state's equity interest or shareholding is not less than 51%'.36 China's BTS market is almost entirely occupied by three major suppliers (all offering both fixed line and mobile services and all State-owned): China Mobile Communications Corporation (China Mobile), China Telecommunications Corporation (China Telecom), and China United Network Communications Group Co. Ltd (China Unicom). The State shareholding in these companies is held by the State-owned Assets Supervision and Administration Commission and not by MIIT. However, both thee government outfits namely, SASAC and MIIT remain intimately involved in the suppliers' operations.³⁷

In addition, telecom tariffs also remain strictly under the influence of the Central government. There is no uniform market driven tariff plan in China unlike developing countries like India. It changes from region to other parts of the country. There are mainly three types of tariffs:

multilateral trading system': *Trade Policy Review Mechanism*, LT/UR/A-3/TPR/1(signed 15 April 1994, entered into force 1 January 1995) [A(i)].

³⁴ Milken Institute, *Opacity Index 2009: Measuring Global Risks* (April 2009) 1, 3. See also 'Selling foreign goods in China: Impenetrable', *The Economist* (15 October 2009).

³⁵ WTO Trade Policy Review Body, Trade Policy Review: Report by the Secretariat – China, WT/TPR/S/199/Rev.1 (12 August 2008)

³⁶ Telecommunications Regulations of the People's Republic of China, State Council Decree No 291 (promulgated and effective 25 September 2000) art 10, as translated in TransAsia Lawyers, China's IT & Telecoms Legislation (Vol III) (TransAsia, 2003),p. 284.

³⁷ See generally Barry Naughton, 'Top-Down Control: SASAC and the Persistence of State Ownership in China', paper presented at *China and the World Economy* conference, University of Nottingham (23 June 2006).

government set, government guided, and market adjusted.³⁸ For example, the MIIT sets tariff caps for fixed-line domestic, international long-distance telephony, and mobile domestic roaming.³⁹ Tariffs for different telecom services vary significantly by region due to economic conditions and users' ability to pay. The current regulatory framework for telecom tariffs includes: Measures on the Approval and Filing Procedure of Telecommunication Tariff, the Catalogue of Telecommunications Tariffs Subject to Market-adjusted Prices, and the Catalogue of Telecommunications Tariffs Administered by Provincial Communications Administration Authorities. The Regulations on Telecommunication stipulate that, where there is "adequate competition", prices of telecom services must be determined by the market. Tariffs for value-added services, and services where there is "sufficient market competition" ⁴⁰ have been liberalized gradually since 2002. All these developments considerably indicate the influence of the Chinese Government in handling the entire telecommunications service sector to a great extent and it is her own wish that kept the sector so restricted even now.

4. SUMMARY

China's telecommunications sector has undergone a sea-change since its accession process began. Fundamental changes took place in its structural as well as functional areas. From functioning as a wing of the Government, it went on to introduce market reforms thus institutionalising the distinct identity and functioning of regulators and service providers. The sector has remained a strategic sector as it contributed both to the manufacturing as well as service segments of the economy. With the joining of the WTO its strategic importance has increased because of the global connectivity and the issues of national security and sovereignty. China's GATS commitments symbolize a major initiative towards telecommunications liberalisation. Within a period of six years from the date of accession, i.e., by the end of 2007, it promised to lift all forms of restrictions as far as market access to its territory is concerned. This is an encouraging sign for the trading partners who are all waiting and genuinely interested in establishing and nurturing a continuous trading relationship with China. By and large the

³⁸ Details of the government-set and government-guided tariffs administered by the Central Government are provided in the Catalogue of the National Development and Planning Commission and the State Council on Ministerial Pricing (Decree No. 11 of the National Development and Planning Commission). The Notice on Implementing the Market Adjusted Pricing for Part of the Telecommunication Business provides information regarding market adjusted tariffs.

³⁹ In March 2008, China lowered calling charges on domestic roaming of mobile telephone from Yuan 1.3-1.5 per minute to no higher than Yuan 0.6 per minute, and called charges from about Y 1.3-1.5 per minute to no higher than Yuan 0.4 per minute. Tariff caps are Yuan 0.07/6 seconds for domestic long-distance telephony, and Yuan 0.8/6 seconds for international long-distance telephony (for outgoing calls to the Hong Kong and Macao SARs, and Chinese Taipei, the tariff cap is Yuan 0.2/6 seconds). Various provinces have different ceilings for call charges within the operating range of local wired telephone networks, ranging from Yuan 0.18 per minute to Yuan 0.3 per minute. Single-direction charging of mobile telephone business, in which the called numbers are not charged, has been implemented within the business range to which the calling numbers belong, equivalent to the range of a local wired telephone network.

⁴⁰ Trade Policy review China 2010, available at http://www.wto.org/english/tratop_e/tpr_e/s230-04_e.doc

commitments have allowed China to accrue gains in terms of providing employment, improving the service base, satisfying a wide range of consumers' needs and helping in registering high economic growth. Signs of improvement have begun to show as it opened up the sector with some restrictions.

Through process of phase wise liberalisation, it has increased its domestic consumer base by providing connectivity to many regions of the country and also remaining connected to the outside world. The industry also witnessed a sustained growth in its size since reforms began in the sector. The total value of telecom business services had soared from RMB 1.9 billion in 1978 to around 1.85 trillion in 2007 to approximately 2.5 trillion in 2010 (China Statistical Yearbook, 2008 and 2011).

The ongoing global financial crisis and global economic meltdown have not affected the sector in a major way. As a strategic and futuristic sector, it has the potential to grow. The telecommunications sector in China is set to prosper as more and more businesses are expected to employ more sophisticated telecom services.

In the long run, China's telecom industry will develop into an information service industry. It will constantly endeavour to improve its quality which can compete with service providers in developed countries. It will aim to provide quality, reliable, safe and diverse information services to the Government and to all sections of the society. As restrictions have been withdrawn, international players are allowed to operate in China. Vodafone is currently entering into an arrangement with China Mobile to provide services. This would infuse a sense of competition among the Chinese service providers. Such competition will lead to form an industrial chain for the coordinated development of all market players. This will help promote economic growth. Many experts believe that with an efficient regulatory system in place, many business brands with indigenous intellectual property rights (IPR) will enter the market. The Chinese telecom service providers will become more competitive in the overseas markets and will create a secure market for themselves as China has done in other sectors like hardware, electrical machinery, textiles, toys, etc. (Yong, 2009: Personal Interview).

Today, high barriers to foreign entrants in the telecommunications service sector, have indicated that many potential entrants and even the WTO would concede that China have marginally kept to the agreed schedule for phasing out WTO commitments in the telecommunications sector. If China's current approach to telecommunications regulation proves not only impervious to reform but also legal under WTO rules, WTO Members will have all the more reason to ensure that these circumstances do not arise again.

The paper in a way highlights some of the WTO inconsistencies still persist in China. Most of them are associated with transparency, regulatory independence and competition. Looking at the commercial enormity of this sector, the US may put enough pressure on China in strengthening the GATS discipline in terms of transparency and regulatory independence. The

future uncertainty of the sector will also force members of the WTO to freshly look at telecom industry in China by revisiting the China's GATS commitments. Because China's GATS commitments were projected upon its WTO accession as a getaway to genuine market access for foreign services providers. Based on this expectation, many WTO members sold China's accession to their domestic constituencies.

Another important understanding from this study is that China's telecom service sector was less paced out compared to its manufacturing or industrial sector. That is because when China wanted to integrate with the world economy it laid much emphasis on its 'manufacturing sector' knowing pretty well that its 'core strength' lies in manufacturing sector. As a result, it liberalized FDI policies initially in late 1970s and 1980s at rapid pace. The sector received 'State Patronage' whereas services sector was put into an 'Experimental Use' or opened out in a gradual and phased manner.

The Government in China is currently facing another significant challenge as the innovation in telecom technology is taking deep roots through 3G. Innovative services and different consumer requirements are forcing the industry to be more competitive. To make the market and industry more growth oriented and fair and equitable, a competition law needs to be in place. To ensure the confidence of investors in China's telecommunications sector, and to ensure that China continues to develop a transparent, pro-competitive, and effective telecommunications industry, the Chinese government needs to take proactive measures to fulfill this challenging task.

It is certain that the telecommunications sector in China is on an expansive mode. Its mobile and internet sectors are the largest and second fastest growing in the world. For China to remain largest mobile telecom user, it must focus on allowing an early entry for the foreign investors so that a free and fair competition can take place in the market which will be genuinely price competitive for the consumers. All this pose a big challenge for the current telecom regulatory body. To a large extent, the Government's role and involvement will be a major determinant in shaping future growth of China's telecommunications service sector.

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Appendix

Basic Conditions of Post and Telecommunication Services during 2001-2008

Item	2001	2002	2003	2004	2005	2006	2007	2008
Business Volume of Post and Telecommunication Service (100 million Yuan)	4556.2 6	5695.80	7019.7 9	9712.2 9	12028.54	15325.87	19805.06	23649.52
Number of Mobile Telephone Subscribers at Year- end (10 000 subscribers)	14522.	20600.5	26995. 3	33482. 4	39340.6	46105.8	54730.6	64124.5
Local Telephone Subscribers of at Year-end (10 000 subscribers)	18036. 8	21422.2	26274. 7	31175. 6	35044.5	36778.6	36563.7	34035.9
Local (Urban)	11193.	13579.1	17109.	21025.	23975.3	25132.9	24859.8	23155.9

Telephone	7		7	1				
Subscribers at Year- end (10 000 subscribers)								
Rural Telephones Subscribers at Year- end (10 000 subscribers)	6843.1	7843.1	9165.0	10150. 5	11069.2	11645.6	11704.0	10880.0
Number of Post & Telecommunications Offices(unit)	57136	76358	63555	66393	65917	62799	70655	69146
Length of Postal Routes and Rural Delivery Routes (10 000 km)	659.53	659.22	680.20	686.70	697.15	693.64	717.05	735.00

Source: China statistical yearbook, 2011