Fragmenting the Governance of Telecommunications Sector in China: Implications to China's WTO Accession and Compliance

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Abstract:

The separation of the government from the industry in telecommunications sector was carried out in a gradualist or experimental manner to make sure a "reform without losers". Both the supervising ministries and local governments became the "early winners" who were in favor of the status quo. A meaningful industrial reform started from 1994 but ended in 1998. China's entry into the World Trade Organization (WTO) was just right on time to secure the outcome of the reforms.

However, determined by the nature of uncompetitiveness and state monopoly, the telecommunications sector was against the liberalization requested by the GATT/WTO members. Close administrative and financial connections between the supervising ministry and subordinate sector caused a high degree of convergence of their interest that in turn implies that the ministry had strong incentives of protecting the sector. After having terminated the fragmented governance since 1995, the Ministry of Information Industry (MII) successfully prevented the sector from giving much concession compared to the other sectors during Sino-US negotiations. Although a limited concession was made, it is possible that the supervising ministries would not fulfil its commitment. On the one hand, the MII would refuse to cut off its administrative and financial ties with the enterprises. On the other hand, the enterprises would still be willing to be protected by the government for the monopolistic benefits. Even though the door is half-open to international competition, the Ministry had developed other means to block the entry of foreign service providers.

A new form of fragmented governance is taking shape since 2003 when the State Asset Supervision and Administration Commission (SASAC) was founded. It created tensions between the bureaucracies and might create loopholes for the foreign entry in the future.

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Financial market, agriculture, telecommunications, and automobile were the sectors on which we would not give concession to the counterpart during the negotiation of WTO membership. China's automobile industry was the most protected sector. They imposed significant pressure on the negotiators.

----------Long Yongtu (2005: 24)

1. Research questions

The People's Republic of China started to reform its central planning economy since the late 1970s. A successful "shock therapy" in rural sector paved the way for a gradualist approach of reforming urban industries. The Chinese government granted automony to the state-owned enterprises (SOEs) for the purpose of letting the "invisible hand" play the fundamental role. China's entry into the WTO at the turn of the century was widely considered as a milestone for its market-oriented reforms.

However, the review by Long Yongtu, chief negotiator of Chinese WTO negotiation team, provides us with a controversial picture. It reminds us with a series of questions: why did negotiators want to protect domestic telecommunications services? Why and how was telecommunications industry able to influence the decision of the negotiators? These empirical questions can be restructured in a theoretical way, especially in the literature of political economy of contemporary China: what is the role of state in trade liberalization? What is the relationship between the government and industry? Why was the relationship between the government and industry sector-specific?

2. A Breif Review of the Literature

Structural force is fundamentally important in IR theories, including international political economy (Waltz, 1959; Axelrod and Keohane, 1985; Wendt, 1992; Gilpin, 1987). Polanyi (1944) reminded us the state's resistance towards the transformation of global market integration. The New Political Economy requested an understanding of the state as "the new hierarchies of the global economy cut across national boundaries" (Gamble et al., 1996: 10). In a more specific issue like the negotiation of trade liberalization, Putnam's (1988) "two-level games" leads us to open up the black box of the country as a unitary decision maker (also see Evans, 1993).

The literature on contemporary Chinese politics has been changing its focus from the leadership to the government and to the society. Most China specialists admit that Mao Zedong and Deng Xiaoping made almost all of the "big decision(s)" during their respective terms (Barnett, 1985: 7; Bachman, 1986). However, political reforms in the last three decades had witnessed a change from elite factions toward bureaucratic politics (Unger ed., 2002). Lieberthal and Oksenberg's (1988) "fragmented authoritarianism" snapshot the evolving relationship between the leaders and government (also see Lieberthal and Lampton eds., 1992). The influence of the bureaucracy was on the rise (Teiwes, 1995: 21; Paltiel, 2001; Lin, 2004). Although state leaders, like Jiang Zeming and Hu Jintao, still retained the power of ultimate decisions (Swaine, 1995: 3; Fewsmith, 1999; Groombridge, 2000: 183; Goldstein, 2001: 837-8; Breslin, 2005), the emerging technocrat-style bureaucracy has become an indispensible force in the decision making of economic policies.

In the specific issue of China's trade liberalization, there is a lack of communication between political scientists and economists. On the one hand, political scientists intended to emphasize the roles of leadership and bureaucratic interests that influenced the process of WTO accession (Satchit, 1999; Pearson, 2000; Lai, 2001; Sheng, 2002; Liang, 2002; Zeng, 2004; Zeng ed., 2007). On the other hand, economists analyzed the same process through the understanding of the comparative advantage and market structure of Chinese economy (Bach et al., 1996; Anderson, 1997; Wang Zhi, 1999; Chen and Feng, 2000: 324; Wu, 2001; Lardy, 2002; Chen, 2002). Some analyses of political economy incorporated the two explanations by simply assuming that bureaucratic and sectoral interests were identical (Wang Yong, 1999: 43; Pearson, 2000: 350-2, 361; Liang, 2002; 717; Lawrence, 2008: 163-4). However, the assumption is not taken for granted. It should be treated very carefully.

Scholars on China's telecommunications services usually assumed a close tie between the Ministry of Post and Telecommunications (MPT)/ Ministry of Information Industry (MII) and

major enterprises in the sector but failed to provide detailed explanations. For example, Zhang (2001: 478) asserted that the MII and local postal, telephone and telegraph branches (PTTs) share common values in ideology, ownership, and ultimate goals. But he overlooked the intervening role of the local governments. Mueller and Lovelock (2000) suggested that there was an effective alliance of interests between China Telecom and the "state", which gave rise to a bargain whereby China Telecom was effectively shielded from foreign competition in return for advancing the state's interests in the expansion of infrastructure into more remote areas of China. However, they failed to identify the fragmented nature of the central state that implied that the interest of the "state" as a whole was not always representative of the individual ministries. Both studies could not uncover to what extent the interests of the ministry and sector converged and how this relationship varied in different time periods. It might not be a concern for Yang (2004: 38) who believed that the creation of the MII as a "regulatory power" in 1998 was "used not to monopolize but to promote competition through a breakup of China Telecom and the entry of new players". However, government-industry relations in the telecommunications sector is worthy of study as its evolution by the end of the 1990s influenced the result of WTO negotiations that in turn impacted their relationship in the future.

This chapter argues that administrative structure in telecommunications services in the 1990s was fragmented as Lu and Wong (2003: 21) had observed. Uncooperative behavior between China Telecom (supervised by the MPT) and China Unicom (supervised primarily by the Ministry of Electronic Industries (MEI)) jeopardized their monopolistic profits in the sector and created loopholes for foreign entry. Both China Telecom and China Unicom came under the MII's supervision in 1998 in an effort to terminate their uncooperative actions. The breakdown of one monopoly (China Telecom) was an attempt to created four monopolies in their respective subsectors. Under the umbrella of the MII, their dominance would not be challenged by the entry of new players. Having successfully protected its subsidiaries through the negotiation of WTO accession, the MII would continue with its political intervention after the entry. The regulatory body in telecommunications services is not taking shape yet.

3. Government-Industry Relations in Telecommunications Services

3.1 The Telecommunications Services

The MPT had been solely providing telecommunications services in China till September 1994 when China Unicom was set up by the State Council for the purpose of "bringing in some competition to the sector" which was defined as "controlled competition" by DeWokin (2001: 632). In response, China Telecom, separating from the MPT, became an "independent" company. In 1999, China Telecom was divided into four companies, namely China Telecom, China Mobile, Guoxin, and China Satellite, each specialized in the services of fixed-telephone lines, mobile communications, paging, and satellite transmissions respectively.

3.2 Supervising Agencies in the Central Government

The MPT changed its role from service provider to supervising agency since China Telecom was carved out in 1995. The founding of China Unicom in 1994 brought the MEI, the Ministry of Railway (MOR) and the Ministry of Electric Power (MEP) in supervising group. The MII was created in 1998 during administrative reform to supervise the industry. The newly established "super ministry" incorporated the MPT, the MEI, the Ministry of Radio, Film, and Television (MRFT), the State Radio Regulation Commission (SRRC), the satellite administrations of the China National Aerospace Industry Corporation, and the Aviation Industries of China.

Telecommunications equipment manufacturing officially separated from the sector in 1984 when the State Planning Commission (SPC) mandated that the Ministry of Machine Building and Electronics Industries (MMBEI) was the main telecommunications equipment manufacturer and the MPT was the primary user. The development of two sectors was subject to different industrial policies. The manufacturing sector has followed China's overall pro-foreign investment policy with a conventional goal of helping indigenous manufacturers to acquire foreign capital, advanced technologies, management knowledge, and market

accesses. In contrast, the "no foreign direct investment" policy has been instituted in China's service provision sector, based on its economic, political, and social concerns (Tan, 2002: 18; Mueller and Tan, 1997). The telecommunications manufacturing sector was liberalized earlier and closely connected with the MEI. The MEI supervised the manufacturers that dominated three quarters of the market share in the sector.[1] Accordingly, the MEI was mainly responsible for coordinating telecommunications equipment manufacturing and the MPT/MII was mainly responsible for telecommunications services throughout the GATT/WTO negotiations. Although the MII incorporated both supervising agencies through administrative reform in 1998, the manufacturing sector was in the trade category of goods while the service sector was in the trade category of services. This chapter focuses on the MII's effort to protect the service sector.

3.3 "Decentralization" in Telecommunications Services

Government-industry relations in telecommunications services experienced three periods of development in the 1980s and 1990s. The first period started from the MPT's attempt to clarify the division of labour between the central MPT and local PTBs in 1984. The second period was marked by the entry of China Unicom that led to uncooperative behaviour among the monopolies in 1995. The third period commenced from the administrative reform in 1998 when the MII strengthened its control of the sector through incorporating China Unicom.

3.3.1 Clarifying the Division of Labour between Central and Local Authorities in Telecommunications Services, 1984–1994

Before the 1980s, the telecommunications administration system was dysfunctional. The MPT could not effectively control the local branches (Lu and Wong, 2003: 36). In 1979, the MPT, no longer tolerant of the administrative structure that fragmented its management, filed a report to the State Council to fight for its lost administrative power. In 1984, by recognizing the authority of local governments, the MPT clarified the division of labour between the central MPT and local Post and Telecommunications Bureau (PTB). By doing so, the MPT effectively regained administrative control.[2]

The central MPT took full administrative control of the inter-provincial, national, and international telephone services, while granting some autonomy to the provincial PTBs on intra-provincial telephone services. Rural telephone networks were operated by companies owned and run by county-level or town-level governments. Enterprises at village level were collectively owned by peasants. The MPT did not have any administrative or financial control of the rural telecommunications service providers (Lu, 1994). However, their gross assets and revenue were so little that their presence in national-wide statistics was negligible. Thus, rural telephone networks are not included in this study.

Intra-provincial telephone services throughout China were supervised by provincial authorities. The PTBs were more closely aligned with the local governments than the central MPT (Ken, 1994: 88–9). However, the MPT did retain the power of overriding the will of local government in certain areas (Table 1). A closer look at the central MPT's administrative control of the local PTBs reveals the following: 1) plan of production management. The MPT, in consultation with the provincial government, developed annual contracts with the PTBs on the basis of production quotas; 2) capital investment. The local governments were allowed to approve the capital investment of less than RMB 20 million that was usually sufficient for the intra-provincial network construction (Wan, 2001: 168); 3) allocation of wage and bonus. After remitting the revenue to the MPT and the MOF, the PTBs had the decisive role in allocating the wage and bonus within the bureau; 4) asset management. By signing contracts with the PTBs, the MPT authorized them to manage their own assets; 5) personnel and labour management. The MPT retained its right of appointing senior officers of the PTBs while

[1] The other telecommunications equipment manufacturers were affiliated with MPT or MOR or cooperated with foreign companies in the form of joint venture (Liang and Ding, 2001: 73-4).

[2] See "MPT report on the reorganization of the management system of posts and telecommunications 1979", in *China transportation yearbook 1986* (Beijing: China Transportation yearbook press, 1986), 342-3, quoted from Zhou (1997: 74).

leaving other personnel and labour management to the local branches;[3] 6) procurement of material. The MPT controlled nation-wide procurement through its supervision of the China National Postal and Telecommunications Appliance Corporation (CNPTAC). For state-allocated equipment, the PTBs were willing to purchase through the CNPTAC for a cheaper price. For imported equipment, the PTBs preferred to bypass the CNPTAC through the use of provincial trading companies; 7) alliance management. It was not allowed. The PTBs were still local branches of the MPT. Investment was allowed on the precondition that the investors would not be directly involved in internal management;[4] 8) price. The MPT adopted a price cap system and allowed the PTBs to float their charges of installation fee and intra-province calls below the cap, subject to the approval of local governments' price control authorities;[5] 9–10), internal organization and sales. The MPT also significantly restrained itself from disrupting organizational management and sales after having devolved authority to local governments.

To conclude, the MPT fully controlled the inter-provincial, national, and international telephone services. It also effectively controlled certain functions in intra-provincial telephone services, although its influence *varied* in different provinces in what by Harwit (2008: 36) calls a "double administrative system".[6] The administrative connection between the MPT and telecommunications sector was close in the late 1980s and early 1990s.

Table 1 MPT's Effective Control of Local Telecommunications Services by 1994

Items	Degree of control by the MPT	Items	Degree of control by the MPT
1. Plan of production management	Partial (contract)	6. Procurement of the materials	Partial (CNPTAC)
2. Capital investment	Little (above RMB 20 M)	7. Alliance management	Full
3. Allocation of wage and bonus	Little (remittance)	8. Price	Partial (price cap)
4. Asset management	Little	9. Internal organization	Little
5. Personnel and labour management	Partial (senior leaders)	10. Sales	Little

Source: complied by the author

3.3.2 Entry of Rival Players in Telecommunications Services, 1995–1997

The relationship between the MPT and its local PTBs did not experience significant change in the 1980s and early 1990s. In 1988, the MPT set up the Directorate-General of Telecommunications (DGT) to build, manage, and operate domestic long-distance and international services. The DGT was supposed to be an independent body in 1994 and incorporated as China Telecom in 1995 (Lovelock, 2009). However, the creation of China Telecom was not followed by any change to the administrative system (Chen, 2001: 203–4). The DGT and later China Telecom did not own any telecommunications assets or provide any services per se. The PTBs reported directly to the MPT (Liang and Zhang, 2001: 1). China Telecom remained as one of the subordinate departments of the MPT that still fully controlled

[3] Since 1986, 4-year appointment was signed between the central MPT and local director. The MPT decided if the directors should be reappointed, promoted, or dismissed, basing on their performance (Xu and Pitt, 2002: 22).

[4] There might be some horizontal alliance between them and non-MPT companies as Lin Sun (1993: 185) argued. However, this kind of management alliance remained informal and mainly concentrated in manufacturing area.

[5] The MPT started to authorize the PTBs to collect installation fees since 1980. In 1990, the decision making regarding installation charges has been completely decentralized to the local bureaux. At the end of 1990, the MPT set a price cap on the intra-province telephone rates according to the local telephone company's average costs plus a mark-up for profit (Sun, 1992: 36-7).

[6] According to Mueller and Tan (1997: 32-3), the Beijing, Shanghai, and Tianjin PTBs had the most autonomy because their first responsibility was to the municipal government. Wealthy and distant provinces, like Gongdong, had also achieved more latitude than many others. According to Ken (1987: 15), the nearer the province is to Beijing, the more deference is likely to be made to the MPT's planning sentiments.

areas such as investment, finance, and personnel (Xu, 2001: 517; Xu and Pitt, 1999; Gao and Lyytinen, 2000: 722).

However, the setting up of China Unicom and Jitong Network Communications Company (Jitong) in 1994 did make some but minimal changes to the government-industry relations in telecommunications services. China Unicom was controlled by the MEI, MOR, MEP, and some other SOEs. Jitong was under the MEI to oversee the so-called "three golden projects" (Golden Bridge, Golden Customs, and Golden Card). Neither of the two telecommunications service providers was required to report to the MPT. Conflict between the enterprises usually needed arbitration from the State Council (Xu and Pitt, 2002: 71). Consequently, the MPT's administrative connection with the sector diminished until 1998.

3.3.3 Incorporation of the Rival Players by the MII, 1998–1999

The MII was founded during the 1998 Administrative Reform to incorporate both the MPT and the MEI.[7] At the core of the new ministry was the old MPT whose officials claimed eight of the thirteen directorates. These included leadership of the most politically sensitive areas of the MII's activities: policy, planning, regulation, economics, wireless administration, personnel, and foreign affairs (Lovelock, 2009).

The newly established MII did not carry out the restructuring programme of separating China Telecom from the Ministry as requested by Premier Zhu Rongji. Premier Zhu ordered Minister Wu to submit a restructuring plan for China Telecom four times without a satisfactory answer (Johnson, 1999c). Instead, the Ministry started to grab administrative control of China Unicom.[8] The MII gradually rooted out the MEI and China Unicom's former leadership from the government and the enterprise. Liu Jianfeng, former chief of China Unicom, was removed from the position of MII vice-minister. The MPT's Yang Xianzu, MII's vice-minister, became the chairman of China Unicom in February 1999. Wang Jianzhou, director of the MII's planning department, took the position of China Unicom's executive vice president and became CEO in 2000. Shi Cuiming, director-general of China Telecom, was also transferred to China Unicom as director. Their inauguration led to a complete termination of Li Huifen's leadership authority in the company.[9] After gaining control of the top-level management, the MII started to impose effective control on China Unicom's local branches through the regulation of personnel and labour management that was previously applied to China Telecom (Caijing Zazhi Bianjibu, 2003: 65).

Having failed to separate the MII from the enterprises during the 1998 Administrative Reform, the State Council took further efforts to restructure the sector. However, these also proved unsuccessful. For example, the decision of dividing China Telecom into four companies—China Telecom, China Mobile, Guoxin, and China Satellite—which was made in early 1999 and implemented in 2000 did not make any changes to the administrative system. They became four monopolies in their respective subsectors and their businesses were restricted to their designated services (Zhang, 2001: 472). The Central Enterprise Working Commission (CEWC) was established for the purpose of supervising the top 100 large-scaled SOEs whose managers were directly nominated by the CEWC and endorsed by Wu Bangguo, the Vice-Premier of the State Council. Although China Telecom was included in the scheme, its relationship with the MII was not changed in practice. In other words, China Telecom was not a real corporation; it remained as an administrative agency under the MII. As Zhang (2001: 478) observed, the MII still held the power to appoint, promote, and dismiss key officials in China Telecom, China Telecom (HKT), China Mobile Communication Groups, China Unicom, and provincial PTBs.

3.4 Administrative Connection between Government and Industry in Telecommunications Services by the End of the 1990s

[7] The MEI controlled the telecom equipment manufacturing before the merger. The MII started to control both service suppliers and equipment suppliers since it incorporated the MEI. The service supply was fully controlled by the SOEs, while the equipment supply was provided by not only the SOEs but also non-state actors (Fernandez and Fernandez-Stembridge, 2007: 231).

[8] The MII's action of regulating China's internet since 1998 also revealed its effort of centralizing its administrative function through the hierarchical structure. For the details, see Tan (1999).

[9] For the details of the bureaucratic reshuffling, see Harwit (2008: 62-3).

The MPT effectively reinforced its control of telecommunications services in the early 1980s by clarifying the division of labor between the central MPT and local PTBs. The MPT, fully controlling the business of inter-provincial, national, and international telephone services, shared administrative authority with the local governments on the business of intra-provincial telephone services. Its administrative connection with the sector was close in the late 1980s and early 1990s. The setting up of China Unicom diluted the connection between the MPT and the sector. However, the newly established MII regained its control over the previous level through incorporating China Unicom. The next section explores the financial ties between the MPT/MII and the telecommunications industry.

3.5 Financial Connection between Government and Industry in Telecommunications Service by the End of the 1990s

Before the 1978 Reform, all revenue collected by the local bureaus were remitted to the Ministry of Finance and then redistributed to different ministries and provinces through fiscal channel. There was no direct financial connection between the MPT and local bureaus.

According to Lu Ding (1994: 200), there was no independent accounting at the PTB level before 1985. In 1980, the PTBs transferred an agreed amount of profit and taxes to the MPT and the state respectively, while retaining the rest of the profit. In principle, of the after-tax profit (ATP) calculated by this method, 80% would be retained by the enterprise and 20% would be handed over to the central MPT. Industrial policy on the telecommunications sector was promulgated by the State Council in 1982 to allow the PTBs to remit 10% of its profit as tax to the state which was much lower than the tax rate of 55% for other industries. The MPT also introduced a contract system with the local bureaus by the end of 1985. According to the World Bank (1992), the PTBs should transfer 10% of net allocated profit (AP), 70% of depreciation of long distance investment (DL), 30% of new technology development fund (TF), and Operating Surplus (OS).[10] In 1989, MPT decided to ask the PTBs to remit 20% of net allocated profit together with other transfers. Thus, the financial connections (FC) between the MPT/MII and the China Telecome in different time periods from 1980 to 1999 were as follows:

FC (1980-1985) = 20%ATP
FC (1985-1988) = 10%AP+70%DL+30%TF+OS;
FC (1989-1999) = 20%AP+70%DL+30%TF+OS;

Note: FC: fiscal connection; ATP: after-tax profit; AP: net allocated profit; DL: depreciation of long distance investment; TF: new technology development fund; OS: Operating Surplus

China Unicom was created by the State Council in September 1994 for the purpose of bringing in some competition to the sector. The proposal of introducing a competitor was initiated by the MEI, MEP, and MOR, each of which had 25% ownership along with 13 other state-owned investors. Its revenue was directly remitted to the shareholders. After signing the CCF agreement, according to Yu Xiaomang, 75% of China Unicom's profit was handed over to foreign investors. In some provinces or cities, foreign companies took as much as 90% of the total profit from these local China Unicom branches (Caijing Zazhi Bianjibu, 2003: 48). The MPT did not have any financial connection with the Unicom.

Although China Unicom came under the MII's supervision in 1998, their financial tie was not established immediately. In order to take financial control of the enterprise, the Ministry asked foreign investors to withdraw their investment. By September 1998, all of the foreign investors in the CCF scheme were notified that their agreements were to be terminated. The MII, in October 1999, decided not to pay revenue to the foreign companies that refused to terminate their contracts. At the same time, the state poured RMB 12.6 trillion into China Unicom, including 6.9 trillion from MII-supervised Guoxin Paging Corporation and 5 trillion from the Ministry of Finance. After financial restructuring, the MII became the biggest stakeholder of China Unicom, as the share of previous domestic investors was cut to less than 20% of total assets (Caijing Zazhi Bianjibu, 2003: 69). The MII grabbed financial control of both monopolies in the sector.

[10] Operating surplus=actual profits-allocated profits. For the fiscal data, see East Asia Dept. II., Asia Technical Dept. (1992: 17-8).

Before fully eliminating foreign investment in China Unicom, the ministry continued its discriminatory policy against the enterprise even though it had started to administratively supervise the enterprise. In 1999, in order to guarantee the profit of China Telecom, the MII stopped China Unicom's right to provide DII service which was extremely profitable (Liu, 1999: 16). In the same year, Minister Mu discouraged lower level governments and other agencies from developing the telecommunications industry, saying that any unnecessary competition would disrupt the state's strategic plan in the sector (Xinxi chanyebu buzhang Wu Jichuan zhichu, fazhan xinxi chanye buneng yihong ershang, 1999: 42). Especially in the business of domestic and international long-distance calls that produced a huge profit and had great potential for development, the Ministry did not allow any competitor to enter the market.[11] Discriminatory policy against China Unicom was finally ended when the financial restructuring programme was completed.

To conclude, in China, the financial and administrative connections between the telecommunications services and MPT/MII were very tight, in turn leading to a convergence of their interests. The next two sections will study the sectoral interests and bureaucratic interests in face of trade negotiation.

4. Sectoral Interests on Trade Negotiation

Petrazzini's (1995) comparative analysis on telecommunications reform in developing countries in Asia and Latin America concluded that the status of the domestic economy at the moment of liberalization and how investors assessed market prospects explained the variations among them. Accordingly, competitiveness of telecommunications service providers is a key variable in identifying their stance towards market liberalization.

Generally speaking, China Telecom and China Unicom at the time were not competitive in global telecommunications services. In order to protect their interests, the sector opposed fierce competition brought about by China's WTO accession.

China's telecommunications services were not competitive in terms of sector size, productivity, production efficiency. Measured by sector size, China's telecom revenue was only $37.1 billion in 2000, 21% that of the United States's and 40% that of Japan's in 1995. As for productivity (revenue per employee), the average world level was $126,000 in 1996: $203,000 in the United States and $438,000 in Japan. In China, revenue per employee was only $54,000 (Yu, Berg, and Guo, 2004: 728). Measured by production efficiency (total subscriber lines—fixed and mobile—per employee), Zhang (2001: 470)'s calculation showed that China Telecom only accounted for 51.7% of Nippon Telegraph and Telephone Corporation (NTT)'s production efficiency in 1997. More seriously, know-how and experience about competition were extremely limited. A report by the World Bank in the early 1990s showed that the efficiency of telecommunications supply in China was among the lowest in the world and service quality was not up to standard (He, 1994: 208).

Whether the domestic telecommunications sector could survive the competition through liberalization was not clear before its entry into the WTO. However, one thing was certain: domestic telecommunications providers were not able to get any benefits in the near future. Thus, they could not be expected to be supportive of lowering the entry barrier for foreign competitive players. In fact, the uncompetitive nature became a good excuse for the sector to ask for extending the protection. However, competitiveness alone could not explain the outcome of trade negotiations. The negotiators fought hard for the telecommunications sector but easily backed down for the agricultural sector, although both were uncompetitive at the time. There must be some other factors explaining the variations.

5. Sectoral Pressure on Trade Negotiation

Cooperative behaviour is usually guaranteed among monopolies, as the cooperation guarantees their monopolistic benefits. It is not easy for a latecomer to develop into a monopoly, as the incumbent monopolies would prevent new competitors from jeopardizing their monopolistic interests. However, it can happen when the government intervenes. China's telecommunications industry in the 1990s was a good example. China Unicom was able to become the second monopoly since 1994 because of state intervention. Two

[11] The average charge for telephone call was seven times of that in the United States in the year of 1999 (Jiaru Shimao dui Woguo Butong Hangye de Yingxiang, 1999: 33).

monopolies supervised by different ministries led to uncooperative behaviour that in turn created loopholes for foreign entry. Administrative reform in 1998 called for an end to uncooperative competition. A unified voice against market liberalization was strong, as both China Telecom and China Unicom came under the supervision of the same protector—MII.

The global trend of liberalizing the telecommunications sector, starting from Britain and then spreading to Asia and Latin America, took place in the 1980s and 1990s. However, it did not change the Chinese mindset of protecting the sector. China's telecommunications services were far from privatization and market liberalization. State-owned enterprises monopolized the services of international long distance calls and allowed only limited competition in local calls, mobile phones, and paging services between state-owned providers (Singh, 2000: 886).

Measured by market share, China Telecom dominated all subsectors in telecommunications services (Table 2). Its degree of domination varied between paging services, mobile phone services, and long-distance calling services. For example, there were more than 2,100 enterprises competing in radio paging services (Liang and Zhang, 2001: 102). China Telecom, the biggest radio paging operator, had 34.19 million paging subscribers by the end of 1997. However, its total market share was only 67.68% and floated around 60% in the late 1990s (Liang, Zhang, and Yang, 1998: 58; Caijing Zazhi Bianjibu, 2003: 20).[12] There were only two companies, China Telecom and China Unicom, in mobile phone services.[13] Although China Telecom's market share started to decline since 1995, it remained as high as 91% by 1999 (Table 3). China Telecom monopolized the services of domestic and international long distance calls. It did not allow any competitor in the area.[14] In 2000, the approximate market shares for telecommunications as a whole were as follows: China Telecom, 57%; China Mobile, 34%; and China Unicom, 8%. All three were supervised by the MII at the time. Their total share was 99%. Other very minor players included Jitong and Netcom that were owned by other ministries or state-owned enterprises (SOEs) (Wu, 2004: 221–2).

Table 2 Major Players and Their Business in Telecommunications Services

Item/year	Before 1994	1994	1997	1999
International long distance calls	MPT	China Telecom	China Telecom	China Telecom
Domestic long distance calls				
IP long distance calls				China Telecom, China Unicom, China Netcom, Jitong
Intra-city calls		China Telecom	China Telecom, China Unicom	China Telecom, China Unicom
Mobile calls		China Telecom	China Telecom, China Unicom,	China Telecom, China Unicom

Source: Chen, 1999: 120–30

Table 3 Major Players and Their Market Share in Mobile Phone Services (%)

	1994	1995	1996	1997	1998	1999
China Telecom	100	c.100	c.99	97	94	91
China Unicom	-	0.3	1	3	6	9

Source: Harwit, 2008: 52, 65

China Telecom as an incumbent in telecommunications services was reluctant to share monopolistic benefits with any other players. Throughout the 1980s and early 1990s, the MPT claimed sole monopoly of the sector through its branches. The other ministries were eager to

[12] China Unicom's market share was 6.8% in 1996 and 7.2% in 1997 (Liang and Zhang, 2001: 113).
[13] Greatwall Telecom, affiliated with the People's Liberation Army (PLA), had been less than 1% of the market share by the end of 1998 (Wan, 2001: 170).
[14] China Unicom was allowed to offer local fixed telephone services in only three cities: Tianjin, Chengdu, and Chongqing.

enter the sector for the huge profits stemming from preferential policy.[15] The monopolistic profit in the sector was huge and not transparent. Domestic pressure on reducing the monopolistic profit pushed telecommunications services to set the charges for basic telecommunications services, but failed. China Telecom could always found ways of maintaining its monopoly, like cross-subsidies and dumping strategies. It had successfully minimized competition from China Unicom in the domestic market. For example, the State Council pushed China Telecom to hand over the business of mobile telecommunications services to China Unicom. However, China Telecom refused and postponed the provision of its fixed telephone network to China Unicom for its GSM services (Global System for Mobile communications). At the same time, China Telecom requested to stop charging both end-users (*shuangxiang shoufei*) in mobile phone services. Its aim was to subsidize the mobile phone business with profits from fixed-line telephone services (cross-subsidies), while China Unicom whose main profits came from charging both end-users could not follow suit. Consequently, China Unicom could not pose any serious challenge to China Telecom. In the other subsectors like paging service, China Telecom continuously used dumping strategies in the paging business to eliminate other competitors. In face of great pressure from the State Council to lower monopolistic profit, China Telecom lowered the fees for long-distance calls and Internet access. However, it covered the loss by increasing the fees for intra-city calls and postage. Through this arrangement, the benefits outweighed than the losses for the China Telecom.

China Unicom as a latecomer could not survive without political intervention from the State Council. Disadvantaged by scarce budgetary resources, China Unicom looked to foreign investors as a solution. It made use of the "China-China-Foreign" (CCF) joint investment system. According to the system, a company owned by Chinese local government and one of China Unicom's shareholders could establish a joint venture with foreign companies (for the details, see Xu and Liang, 2001: 141–2). The practice created loopholes for foreign entry that in turn undermined the coherent industrial policy protected the sector from liberalization (Gao and Lyytinen, 2000: 725). It allowed foreign companies to hold than 70% ownership, which was much higher than stated in the final agreement with WTO members in 1999.

Administrative reform in 1998 terminated uncooperative actions between the dual monopolies through putting both of them under the supervision of the MII. The relationship between the two corporations was changed from competition to supplementation. China Unicom switched its interests and policies accordingly. Having claimed the "CCF" illegal, the MII strengthened its control of the barrier against foreign investment in telecommunications services. The sector was able to exert unified pressure on the government to protect its uncompetitive service providers at the threshold of China's WTO accession.

In short, compelled by the nature of uncompetitiveness and state monopoly, the sector was strongly against the liberalization requested by the GATT/WTO members. Close administrative and financial connections between the supervising ministry and subordinate sectors caused a high degree of convergence of interests that in turn implies that the ministry had strong incentives to protect the sector.

6. The Effects of Bureaucratic Interests on Trade Negotiation

The telecommunications sectors were monopolized by government agencies or companies in almost all countries in the 1980s. Krasner's (1985) argument implies that international structural constraints forced Third World countries to protect their telecommunications sector through state intervention. State monopoly in the sector did not allow any domestic or international competitor to enter the sector that could turn potentially challenge its monopolistic control. The MPT/MII in China's telecommunications services was not an exception.

The MPT effectively regained control of telecommunications services in the early 1980s by clarifying the division of labour between the central MPT and local PTBs. The MPT, fully controlling the business of inter-provincial, national, and international telephone services,

[15] The telecommunications sector was promoted for priority development in early 1980s by the State Council. Accordingly, the government issued the "three 90%" policy, that is, telecommunications enterprises could retained 90% of their profits , foreign exchange earnings, and central government's investment as non-repayable loans. For the details, see Xu and Pitt (2002: 30-1).

shared administrative authority with the local governments in the business of intra-provincial telephone services. For fiscal reasons, China Telecom and China Unicom (after 1999) were reliable contributors of revenue to the Ministry. China Telecom was one of the largest taxpayers in the country (Johnson, 1999c). The revenue of the MPT/MII was one of the highest among the ministries. Its revenue grew from RMB 20.1 trillion in 1992 to RMB 85.5 trillion in 1995, and RMB 278.8 trillion in 1999 (*Almanacs of China's Economy*, various issues, 1992–2000). The MPT/MII was reluctant to give up its administrative authority and revenue from the sector as required by market liberalization.

Close ties between the government and the industry are more tangible when we consider the absence of any legal framework or clear policy guidelines in telecommunications services.[16] In the early 1990s, the Ministry repeatedly called for strengthening the administrative planning of telecommunications and retaining its monopoly over the sector (DeWoskin, 2001: 630). The regulations passing through the administrative and fiscal links from the MPT/MII to the enterprises became the only guidance for the development of the sector. The Ministry did not allow any market mechanism or foreign competitors into the domestic sector that would potentially disrupt the administrative and fiscal connections.

The MPT/MII's exclusive control faced continuous opposition from rivalling ministries in the State Council. The MEP, MOR, Ministry of Defence (MOD), and Ministry of Petroleum (MOP) wanted to enter the sector and share the monopolistic benefits. The MPT saw to it that their participation was extremely limited. Most of the ministries, including the SPC, pushed the MPT to reform the sector. They blamed the Ministry for keeping the high price of telecommunications services that had become a "bottleneck" in economic development.[17] However, even the SPC was not capable of influencing the sector through its pressure on the MPT/MII. The SPC decided to relinquish its control over price and allowed the MPT to collect the installation fee for fixed-line telephones in 1979. Since then, the SPC's role in the sector has been to cooperate with the MPT/MII on setting the price of Internet access and telecommunications services and funds for infrastructure. However, the Ministry had avoided dependency upon the central budget. In 1992 and 1993, the MPT requested to keep all revenue in the Ministry's hands for the purpose of re-investing in infrastructure development (DeWoskin, 2001: 630). The investment in infrastructure construction increased from RMB 4.9 trillion in 1990 to RMB 13.7 trillion in 1992 and RMB 449.4 trillion in 2000 (*Almanacs of China's Economy,* various issues). Around 80% of the investment came directly from revenue sources (Lovelock, 2009). According to Quan Yi (2002: 161), total investment in the telecommunications sector from 1979 to 1995 was about RMB 270 trillion, two-thirds of which came from the installation fee of fixed-line telephones. As the MPT did not financially rely on the SPC, its authority of pricing was relatively independent, compared to other ministries. Facing pressure to lower the charges for telecommunications services, the SPC organized the Public Price Hearing in 1998. However, the MII refused to make any concession. The SPC even recommended having a third party to investigate the MII's accounting system (Li).

The situation changed slightly when the MEI, MOR, and MEP entered the sector as supervising agencies in 1994. The fragmentation of control in turn caused a fragmentation of interests in the sector. The rivalling ministries were willing to accept foreign investment in the sector. The "illegal" practice of CCF that practically lowered the entry barrier for foreign companies was out of MPT's control. A fragmented regulation at the time (1995–1998) might have led to a greater concession if the Sino-US final agreement was made in 1997 rather than in 1999, as China's entry into the WTO was considered as a good opportunity for other ministries to break up the monopoly of the MPT.

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[16] The sector was regulated by the Ministry without a clear-cut telecommunications law. For example, the installation fee of the fixed line remained high and arbitrary. The Ministry refused to cooperate on releasing a clear-cut law that might restrain its action.

[17] Intensive debate between the two groups ensued, with both sides mobilizing their think tanks and drawing lessons from other countries to support their argument. Hardy (1980) and Norton (1992)'s works were usually cited for reference. Hardy's analysis shows a positive correlation between the development of telecommunication facilities and the growth of GDP. Norton's finding also implies that the development of telecommunication helps to reduce the transaction cost. The idea was instrumental for the MPT to get more budgetary resources from the central government and for the rivalling ministries to break up the MPT monopoly. By claiming it as instrumental is because the counter thesis that potentially went against their interests never got accepted by the players. For example, Gronin et al (1991) argue that the reversed causality can also be supported. For the analysis on the negative impact of telecommunications on economic growth, see Sieber (1993).

The MPT evolved into the MII and strengthened its control over the sector. MII, a "super agency", assumed all the authority that was previously shared by the former MPT and MEI. The MII had rooted out foreign investors by claiming that the CCF agreement was illegal, and Chinese negotiators did not show any intention of lifting the ban during Sino-US talks (Johnson, 1999a). It left little room for domestic competition from the other state-owned telecommunications companies controlled by the other ministries. In 1998, Minister Wu clearly stated that they were not ready to open up the sector (Guojia dianxin zhuguan bumen fuzenren Wu Jichuan shuo, woguo dianxin yewu duiwai kaifang tiaojian shangbu chengshu, 1998: 43).

To conclude, it was very difficult for the negotiators to give concessions in the area of telecommunications services as the industry was not competitive at the time. The service providers who enjoyed monopolistic status in the sector were able to exert unified pressure on the government for protection. The convergence of sectoral and ministerial interests helps us understand why the MPT/MII was so proactive in protecting the interest of the telecommunications companies in the late 1990s.

7. China's WTO Commitment and Its Compliance in the Post-WTO Period

7.1 Little Concessions in Telecommunications Services

The US request on telecommunications services were: 1) to create an independent regulatory agency and completely separate the administrative link between the government and China Telecom; 2) to set up a transparent and non-discriminatory law or regulation on telecommunications sector; 3) to grant foreign telecommunications service providers national treatment, open domestic value-added market to foreign investors immediately, and allow foreign companies to invest and operate value-added business; 4) to provide an agenda of gradually opening up other value-added telecommunications service, wireless mobile communication service, and wire communication service to domestic and foreign companies; 5) to terminate China Telecom's monopoly on international telecommunications service and dual-monopoly (China Telecom and China Unicom) in the field of basic telecommunications services (Quan, 2002: 157).

However, Chinese negotiators did not show any intention of lifting the ban during Sino-US talks (Johnson, 1999a). In 1998, Wu Jichuan, representing the telecommunications sector, clearly stated that they were not ready to open up the sector (Guojia dianxin zhuguan bumen fuzenren Wu Jichuan shuo, woguo dianxin yewu duiwai kaifang tiaojian shangbu chengshu, 1998: 43).

Minister Wu's statement did not stop Premier Zhu from making concession during Zhu's April trip to the United States in 1999.[18] American media reported that Chinese negotiators had already agreed on the deal offered by their US counterpart. According to Zhu's offer, China would end geographic restrictions for mobile and cellular within six years; China would allow 49% foreign investment in all services and 51% foreign ownership for value-added and paging services in four years.

However, Mr. Wu had been insisting upon giving only the minority stake to foreign companies (Kim, 2002: 448, fn.15). In order to protect the sectoral interests, the MII uncovered internal disagreement to the public for the purpose of preventing Chinese negotiation team from making too much concession to WTO members in the final deal. He was rumoured to have offered resignation on two occasions, one of which was at a meeting of China's cabinet called to discuss reforms that Premier Zhu Rongji proposed during his April trip to Washington (Johnson, 1999b).

It seemed that Minister Wu and the MII won the internal battle in the State Council. The MII, according to Cooper and Chan (1999), considered to lift the ban on foreign involvement in the internet sector during the talks in September, but insisted on protecting long-distance calls and value-added services. The final agreement between China and the United State in November 1999 allowed for 50% foreign ownership in paging service and internet content provision, while 49% cap for the basic telecom services (Lu and Wong, 2003: 79-80).

[18] A ministry official said, according to Johnson (1999a), "When we left, we had agreed to allow foreigners 30% [stake in Chinese companies]…Now suddenly Zhu is offering 49% or 51%. There was no consultation with us".

7.2 China's Compliance in the Post-WTO Period

The telecommunications services received a lot of protection from the MII during the negotiations. The enterprises did not gain more autonomy after the WTO accession. Having given relatively more concessions in value-added telecom services in the agreement, the authority of approving licences was devolved to local governments, especially those in the coastal regions. In contrast, the authority of approving licences to basic telecom services providers was still retained by the MII (Loo, 2004: 708). The MII bore the responsibility of protecting the sector. It would be very difficult for the MII to give up control of the sector, although its style of top-down intervention was not compatible with its WTO commitment.

The MII failed to keep to its commitment of separating the government from the industry and adopting pro-competitive regulatory principles (USTR, 2004: 75). The decision of breaking down the China Telecom into four separate entities was to create four monopolies in their respective subsectors, namely fixed-line services, mobile services, satellite telecommunications services, and paging services. A competition across subsectors was not encouraged. The decision of separating the old China Telecom into two components (south and north) in 2002 also cast a doubt on the competition across regions. A leadership swap in 2004 among the major operators contributed to a rise of their shares in the stock market, as investors believed that the action would reduce competition in the sector (CMI, 2004). Again, in 2008, six major telecommunications service providers in the sector were merged into three. The move, according to Li (2009: 2–3), reflected a "political will" that was not compatible with the new PRC Anti-Monopoly Law enacted on August 30, 2007.

Foreign investors have been frustrated at not being able to enter the Chinese market easily. China's telecommunications services were less developed in the global trade of services. The WTO accession would have potentially seen a significant inflow of foreign investment but did not. The government adopted a strategy of allowing foreign investment through public issue of shares in the stock markets abroad rather than direct joint venture. The practice was believed to ensure that "even this foreign equity is too thinly distributed to offer any serious problems of control" (A Note on FDI Regulations in Telecom, 2004: 10). By 2004, the SASAC held more than 75% of equity in all of these oligopolies (CMI, 2004). Although the option for forming joint ventures was open, the MII had developed various ways to prevent foreign investors from entering the market. For example, it set the requirement of registered capital as high as RMB 2 billion for foreign companies. Although the requirement was decreased to RMB 1 billion in September 2008, it was still high compared to international norms (USTR, 2008: 80). Besides, the application process was slow according to the USTR (2004: 76). No application for value-added services was completed by the end of 2004. Regarding 3G telecommunications standards, China's regulatory authority continued to promote its unique home-grown TD-SCDMA standard after having repeatedly committed to technology neutrality (USTR, 2008: 6). By 2008, there was very little foreign investment in the domestic market, especially in basic telecommunication services, like fixed-line telephones and mobile phones. Some notable exceptions were Telefonica's 9% equity stake in China Netcom, Vodafone's 3% equity stake in China Mobile, and AT&T's participation in the joint venture called UNISITI (Hsueh, 2008: 95).[19]

Fragmented governance is taking shape again in the sector because of the rise of the State Asset Supervision and Administration Commission (SASAC) and the decline of the MII. On the one hand, the ownership of the major telecom services providers was transferred from the MII to the SASAC when it was established. With the approval of State Council, the administration of China Railcom, along with its original stocks, was also transferred from the MOR to the SASAC on January 20, 2004 (*China Business News*, 2004). By then, the SASAC "owned" all of the six major telecommunications service providers. The SASAC's actions of reshuffling the leadership of major telecom companies were suspected of being attempts to gradually remove former MPT officials in the sector. On the other hand, the Ministry of Industry and Information Technology (MIIT) was founded in 2008 to incorporate the MII. The MII was re-named "State Bureau of Telecommunications" and downgraded to sub-ministerial level. Although the Bureau remains the major regulatory body in the sector, the SASAC has

[19] According to Chang (2000), the MII approved the establishment of Shanghai Symphony Telecommunications Company in December 2000, a joint venture of AT&T, the Shanghai branch of China Telecom and a Shanghai municipal government company, to provide broadband networks in the commercial Pudong areas of Shanghai. The AT&T was to hold 25% of the equity.

been aggressively taking over the authority of supervising the companies.[20] A fragmented supervision, similar to the one from 1994 to 1997, was re-emerging.

Conclusion

All in all, the economic bureaucracies at the threshold of WTO accession had high stake in the telecommunications sector. Unified governance had successfully prevented the negotiators from giving concession in the sector that was monopolized and uncompetitive at the time. The WTO agreement did not stop the government from exercising continuous intervention. The WTO mechanism could not help the sector gain more autonomy or become competitive in terms of service quality. The political will of the state is still significant in the sector. A proper regulatory entity in telecommunications in China was far from emerging.

Now, a fragmented supervising board is emerging again in China. Tensions exist between the SASAC that operates the industry and the MIIT that regulates the industry. It suggests that sectoral characteristics are more significant than variations in national characteristics. Japan, which differed in political regime and economic structure, also saw a fragmented state control between MITI and MPT over the sponsorship and regulation of Nippon Telephone and Telegraph (Wilks and Wright, 1987: 288). The relationship between the SASAC and the MIIT in China determines the future of its telecommunications services and its compliance to the WTO framework.

[20] For example, The SASAC has the authority of asset management in the companies. In 2008, SASAC made China Mobile to transfer about RMB 50 billion to China Unicom to boost Unicom's working capital (ChinaVest, 2008).

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