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STRATEGY OF CHINA'S TELECOMMUNICATION TRANSFORMATION

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Abstract

This paper first suggests a revision on the definition of telecommunication transformation strategies in literature, and then uses it to investigate China's experiences of telecommunication reform. The authors conclude that a strategy of telecommunication market transformation must be formed based on the economic and political environment, telecommunication development situation, the characteristics of technology advance, and market requirement.

Keywords: China, reform, strategy, telecommunication, transformation

Introduction

In recent decades, the telecommunication market structure in different countries has been transformed, or is on the way of transforming, from a monopoly to full competition. A large number of publications have addressed the telecommunication reforms in Europe and the United States (Baliga and Santalainen 1999; Collins and Murrone 1997; Noam and Kramer 1994). Some scholars have also taken developing countries as their studying objects (Gao and Lyytinen 2000, 2001; Petrazzini 1995). Yet, of all available researches, strategy is a seldom-touched topic.

Countries have adopted various reform strategies. Analyzing China as the sample, we seek a deep insight into the characteristics of a proper strategy program of telecommunication reform. China presents an interesting case to study, being the largest potential market for telecommunication services and because of its unique economic and political environment for carrying out telecommunication reform. China has adopted a unique strategy program of market change, which has made China's telecommunication sector one of the fastest developing ones in the world.

Concepts

By examining the experiences of reforming the old state monopoly¹ systems in the developed world, Noam and Kramer (1994) conclude that there are four strategies pertaining to the structure of the telecommunication market. They are liberalization, devolution, consolidation, and deregulation. Liberalization means the introduction of competition into a monopolized and market. Devolution is a policy of splitting the monopoly structure. Consolidation is the opposite strategy to devolution. Deregulation means a reduction of government's intervention in the market. It is suggested that, by taking various combinations, these four strategies provide the materials for the new structures aiming at breaking monopoly and introducing competition.

¹PTT (Post, Telegraph and Telephone) is traditional state network operator. When regulatory functions are split up it is referred to as PTO (Public Telecommunication Operator).

While deregulation is the main trend of telecommunication reform, from long term of view competition does not necessarily result in deregulation at all stages of reform. The role of regulation is even more crucial in the market liberalization phase than it was before. The experience has indicated that it requires a “reregulation” to achieve a fair competition. A wide change in the degree and a large difference in patterns of regulation have been presented with time evolving (Collins and Murrone 1997). Also the institutional setting in regulation must change to adapt to market variation.

As a revision to Noam and Kramer's (1994) concepts, we define the market structure strategies as including three approaches of liberalization, reregulation and restructuring (including devolution and consolidation). Instead of restricting to one strategy, usually a country adopts a hybrid of strategies. In different periods for a country, and for different countries, different combination of strategies may be used. We define the schedule of these three strategies as a strategy program.

China's Strategy Program of Telecommunications Market Transformation

China began its telecommunication reform from equipment and value added services. In 1982, due to the fact that the Chinese manufacturing industry was backward, its equipment market was fully liberalized to domestic and foreign competition so that the telecommunication network could develop with advanced technologies. Instead of direct import from abroad China encouraged introducing production lines by joint-ventures or foreign independent investments, which bounded the interests of foreign capitals with the Chinese market. Consequently the domestic products from such two kinds of factories have become main facility sources of the Chinese telecommunication network for their comparatively low price and competent quality (MII 1999). China opened equipment market earlier and more intensively than most developed countries. Owing strong national manufacturing industries, they did not like foreign competitors to share their markets. For example, it was the late 1980s when most EU members opened terminal equipment sales to the countries that had agreements of equal market access with them (European Commission 1988).

In history the telecommunication network and services had been run under monopoly in global scope. This situation just began to change from the US and UK. In China, macro economic and political reform on traditional socialism system and planned economy just began from non-dominant sectors of national economy. Telecommunication network was taken as an infrastructure and a basis of national economy, hence had to be under the absolute control of the state to guarantee national security and sovereignty. China's telecommunication network was extremely weak. In 1980, the telephone penetration rate was only 0.4%. From economic, political and ideological perspectives, there was no ground to execute a telecommunication reform. To promote China's telecommunication to develop from a very poor basis, the government granted preferential policies to telecommunication sector, which was possible under the state monopoly system. The State Council approved MPT to charge an installation fee from every subscriber that corresponded to the construction cost of one line. MPT had a privilege in advancing depreciation, using foreign currency and paying tax. More than half of the whole investment of MPT was from these supports (MII 1999).

New services appeared from middle 1980s. VAS like paging without high network dependence was opened to competition from the late 1980s. Currently it is a highly competitive market with thousands of operators (MII 1999).

The preferential policy and the strong market demand promoted the Chinese telecommunication sector to enter to a new stage. In 1994, the telecommunication development level was already equivalent to the general growth level of the macro economy (Yang 1997). The telecommunication market shifted from a buyer's pull to a seller's push. Therefore, unlike earlier times when the overriding objective was the development speed, currently service quality improvement and tariff reductions became another focus, which could be best realized through a competitive mechanism.

In the global scale, the appearance of Internet arose the topic of national information highway, which required the cooperation telecommunication with media, banking industries etc. It facilitated to extend the competition from VAS and equipment sector to network and basic services. Led by the US and UK, Most developed countries were designing their reform plans. In China the support of preferential policy of the state met strong challenge from society and other industries. Also market competition was the demand of technological innovation and convergence. In macro aspect, China was initializing a statewide governmental reform that aimed at separating enterprise management functions from government branches. Consequently, from 1994 China's telecommunication transformation entered into the second phase. The market structure was transferred from monopoly supported by preferential policies to competition.

In 1994, as a part of macro reform, the State Council reformed the PTT system. Registered as China Telecom, the operating sector of MPT was changed from a functional department of MPT to an enterprise. At the same time, Ministry of Electronic Industry (MEI) with some other state institutions formed Unicom to compete with China Telecom all-around.

At the outset these changes were just like most international practices of telecommunication reforms, which are characterized by forming a coherent regulatory regime with an independent regulator and introducing new operators. But in China these changes were superficial. Both owned by the state, China Telecom and Unicom were the only two comprehensive public operators. Still directly under the control of MPT, China Telecom was not a real enterprise. Meanwhile MPT was not a “pure” regulatory authority. On the one hand MPT could not work fairly in executing regulation but might exercise bias toward its affiliation China Telecom. On the other hand it had not enough power to intervene in the domain of other ministries for example MEI that would also participate in telecommunications market. The case was the same for the whole macro reform that was a superficial make-up. To prevent political disorder, China adopted an “act after trials” policy of transformation. At this time for the first move of reform, it was not intended to fully change the current system designed for the planned economy, but to perform a pilot test for future moves. To meet the regulatory demand from market liberalization, the State Council set up the National Information Infrastructure Steering Committee (NIISC) to coordinate the regulatory function distributed among different state institutions and monitor a fair regulatory market. But as an interim organization it lacked the power to efficiently execute regulation.

From late 1990s China's telecommunication development entered a new phase marked by the forming of advanced, cross-country networks (MII 1999). But the efficiency was low and service quality remained unsatisfactory. In international aspect, competition was putting into practice. In EU, the January 1st of 1998 was the set deadline of full liberalization (European Commission 1997). Adapting to technology advance characterized by network convergence, a tide of enterprise mergers crossing national boundaries and spanning industries like telecommunication, computing and media emerged. A thorough reform on telecommunication industry was also a part of China's plan of joining WTO as soon as possible, which was a national strategy. A deep reform was necessary to foster a fair competition market as required by joining WTO, and improve the competence of domestic operators in the forthcoming international competition. In this context China's telecommunication transformation moved to the third round.

In China, in 1998 a new round of governmental reforms started, which resulted in deep changes in the governmental system. As a result the Ministry of Information Industry (MII) was established based on MPT and MEI. By taking over the regulatory functions of MPT, MEI and NIISC, MII was a coherent regulator with an exclusive power in regulating the whole information industry.

The State Council set the principle as supporting the Unicom and protecting fair competition. China Telecom kept its fixed network and operations, and split mobile sector to form an independent body China Mobile. The paging sector of China Telecom whose turnover was five times of Unicom, and the mobile network of Great Wall as an army-run company were appropriated to Unicom (MII 1999). China Net was formed in 1999 by some state institutions. Consequently China has formed a “national fleet” composed by China Telecom, Unicom, China Mobile and China Net. This was the market prepared to meet for international competition (Gao and Lyytinen 2001).

The fourth stage of reform was promoted by two elements. First, China was formally adopted as a member of WTO at the beginning of 2001. For which China agreed to allow 49% foreign ownership in mobile communications within five years of accession; 49% in international and domestic services within six years upon accession; and 50% in VAS within two years. To make ready for foreign companies to enter into China within recent years, China believed it should re-arrange the market.

Another reason for the new round of reform was that the fair competition has not come as expected. Comparatively Unicom was still too weak to compete with China Telecom. Consequently, China Telecom was broken into two parts by areas. The northern part was composed by eleven northern provincial networks and China Net, and took the name of China Net. The southern part was other provincial networks, and kept the name of China Telecom. Now Unicom is the only comprehensive telecommunication company in that its network spreads the whole country (though not strong), and it has licenses to provide all kinds of services.

Discussion and Conclusion

China has employed various strategies in different aspects within telecommunication industry, as summarized in Table 1. China has been trying to sketch its strategy program for telecommunication market change according to the progress of the macro reforms, the stage of telecommunication development, and international trend of reform and technology advance. Of all, the macro

reform progress and politic consideration is decisive for strategy choice. In China, telecommunication reform has been a part of macro reform and national strategy of economy and politics, like joining WTO.

Table 1. China's Strategy Program of Telecommunications Reform

Stage	Telecommunications development	Macro context	Technology advance and international environment	Strategy of China
1 st stage	Poor networks. User-pull market	Planned system. Poor economy	Telephone network. Fiber appeared. Competition in VAS. US, UK led reform in basic services and network	Liberalization, deregulation on VAS and equipment
2 nd stage	The development level of telecommunications met demand of national economy growth. A user-push market	Superficial macro reform. Fast economic development	Internet and mobile network appeared. Reform PTT and introduce competition	Reregulation on PTT. Liberalization
3 rd stage	Advanced, state-wide networks were formed.	Deep macro reform. Fast economic development	Network convergence. Full competition	Restructuring on PTOs. Liberalization, reregulation
4 th stage	A leading sector in national economy	Joining WTO	Network convergence. Full competition	Restructuring. Deciding timetable of international liberalization

In a whole the Chinese telecommunication reform presents a stepwise, cautious process. Now China is still transforming towards a full competition. First, further deregulation is needed to remove the entrance barriers to allow more dedicated networks to enter into public telecommunication market. While the timetable of market opening to international capitals has been published, the restriction on domestic private capital should also be relaxed. Second, now only Unicom is a comprehensive operator. It is necessary to further deregulate the market, and change other operators to comprehensive ones. The restriction on services for current operators should be released. The competition across areas should be encouraged. Last, a convergence of telecommunication and other industries should be promoted.

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