GLOBAL PERSPECTIVE

Telecommunications in China—More Than Was Bargained For?

John C. Ure, Ph.D.

he flotation of China Telecom (Hong Kong) shares on the Hong Kong and New York exchanges has been interpreted by many as a sign of a breakthrough in the opposition by the Ministry of Posts & Telecommunications (MPT) to foreign direct investment (FDI) in China's telecom sector. It is not. In fact, it strengthens the MPT's hand within China to resist major changes in policy to FDI.

This is yet another example of the basic and common misconception surrounding China's policy-making process which continues to trip up international telecommunications companies hoping to enter China's markets. Wishful thinking, a lack of detailed analysis, and misreading the facts combine to perpetuate the myth that China is moving toward opening its telecommunications markets to foreign direct investment in order to fund much-needed network expansion. The fact is that the MPT remains adamantly opposed to concessions on FDI in networks or network services.

I argue not as a securities analyst, but as an economist with a special interest in telecom policy issues: The China telecom deals herald no such opening, but rather illustrate very nicely that China's State Council and the MPT, in particular, have considerably eased the pressure to open up the telecom markets by taking shrewd advantage of Hong Kong as one of the world's leading financial centers. Red chip stocks are riding high on China business

sentiments, with premiums of 30% or more over fully-discounted earnings valuations. In fact, China telecom interests have been moving into Hong Kong discreetly but determinedly for some time, as illustrated in Table 1.

The first error that analysts frequently make is that China's network growth—from 20 million to 85 million exchange lines in the period of 1990-1995 to 170 million by 2000—simply cannot be financed without resorting to FDI. This needs to be put into perspective to make the point clearly. China, with less than five fixed wireline telephones per 100 population, is to leapfrog, in only five years, the largest telecommunications network in the world—that of the United States. In 1995, the United States had 164 million exchange lines built out over many decades, and 63 phones per 100 population. On the cellular front, China has around seven million users, and MPT's forecasts for 2000 have risen from 18 million to 25 million and now to 30 million. Some analysts believe the real figure will be closer to 45

Figures on this scale indicate that China is rapidly moving away from a supply-push to a demand-pull economy, which has an important financial implication. It means that resources become revenue-based rather than having to be allocated to the provincial Posts & Telecom Administrations (PTAs) (see Table 2 for revenue growth). And as the revenue base grows for both the wireline



Dr. John C. Ure is associate professor at the School of Business and director of the Telecommunications Research Project at the University of Hong Kong.

Table 1 China's Holdings in Hong Kong's Telcos

- China Telecom (Hong Kong) has acquired 5.5% shares of Hongkong Telecom (cable & wireless subsidiary) with an option for 29%.
- Everbright (China) buys 7.7% of Hongkong Telecom shares from CITIC (China) and becomes an institutional investor in China Telecom (Hong Kong).
- China Telecom (Hong Kong) share flotation in Hong Kong and New York; institutional investors include Hutchison, New World, and Wharf Holdings, the companies behind Hong Kong's three new wireline telecom companies.
- China Strategic Holdings (China) acquires Star International Telecom (Hong Kong).
- MPT's Town Khan becomes shareholder in Smartone, a Hong Kong GSM mobile cellular operator.
- China Resources, Ltd is a shareholder in People's Telephone Company, a Hong Kong PCS operator.
- China Travel Services Ltd is a shareholder in Mandarin Communications, Ltd., a Hong Kong PCS operator.
- Tesonic (Ministry of Electronic Industries) and Golden Tripod (Xinhua investment company) set up Hong Kong joint venture with CCT Telecom.
- Casil Telecom (China Aerospace) listed in Hong Kong.
- MPT's subsidiaries in Hong Kong: Telpo (procurement), Putai (posts), Tianbo Jiyou Gongsi, and Jianya Gongso (trading).

Source: J. Ure

In fact, around 80% of China telecom investments come directly from revenue sources (about 35% from installation or connection charges, and 40% from usage charges) and other domestic sources.

and wireless networks, so does the ability of the PTAs to secure financing from domestic sources through arrangements such as leaseback. Financing is also possible through foreign sources, especially from equipment suppliers offering attractive financial packages, as well as offshore and overseas China investment funds. In fact, around 80% of China telecom investments come directly from revenue sources (about 35% from installation or connection charges, and 40% from usage charges) and other domestic sources. Foreign sources account for no more than 20%, although this has grown from around 15% in the early 1990s and is likely to grow a few percentage points between now and 2000.

These figures indicate a strong revenue base, and tariff rebalancing could boost them even further. The MPT has begun to edge up local call charges from a very low base while reducing long-distance tariffs to stimulate usage, and, in 1997, dropped international direct dial charges by a cumulative 51%. Since net international revenues in 1996 were only 16 billion yuan—less than 15% of total revenue—the risk of major revenue loss (assuming short-term demand is price inelastic) is slight, while the longer-

term prospects for growth are good. Moreover, by cutting international tariffs now, the MPT is also undermining one of the potential sources of revenue for its rival, Unicom, and thereby one of the bargaining opportunities for foreign companies intent upon breaking into the China market.

The Bargaining Model

This point brings us to the crux of the matter. Policy making in China is a complex affair that involves the interplay of many different interests subsumed under national

Table 2 MPT Revenues

| Year | Telecom Turnover |
|-------------|------------------|
| 1992 | \$2.6 billion |
| 1993 | \$4.3 billion |
| 1994 | \$7 billion |
| 1995 | \$11 billion |
| 1996 | \$15 billion |
| 1997 | \$19 billion* |
| 2000 | \$34 billion* |
| * Estimated | |
| | Source: J. Ure |

Page 4 4Q97

priorities as determined by party leadership, and as reflected through the State Council and other organs of government. For policy decisions to be made, a lengthy process of bargaining is involved, and the key question is how to get the issue to the top of the State Council agenda. Telecommunications has fleetingly reached the top of the agenda several times because it is recognized as a strategic sector. The efficient and effective flow of information is vital for the party and the government to manage the rapid diffusion of China's economy and the government's economic reforms.

Telecommunications is important for another reason. It is highly profitable and provides the state with one of its major sources of revenue. For that reason, many other ministries want to get into the market themselves. Led by the Ministry of Electronic Industries (MEI), the ministries of Railways and Energy lobbied to launch China's second carrier, LiangTong (Unicom). The People's Liberation Army (PLA) is another important player. Partly to divert the threat of competition, the MPT has entered a joint venture with the PLA to build and operate CDMA cellular networks in competition with the MPT/PTA's GSM digital networks. This alliance effectively blocks a PLA-Unicom alliance.

The *domestic* bargaining model implied by these developments works at both horizontal and vertical levels. Ministries and state commissions vie with each other to gain entry or influence over different aspects of the national information infrastructure. The Ministry of Film, Radio, and Television, for example, is looking to use cable TV as a vehicle into telecommunications, Internet services, and interactive commercial services and appears to be resisting MPT efforts to build jointly. Yet, at some provincial levels, for example in Shanghai, the two have been instructed to cooperate. At the provincial level, there is often rivalry between the fiat of the ministry in Beijing and the municipal government. Again, taking cable TV as an example, while the MPT would like to see a single network under its supervision, in many provincial capitals, there are two

networks, one of which is run by the provincial government.

In every area of information network services in China, there are players positioning themselves. Internet services are another example, where turf battles rage over where ownership and control lies:

- · Network builders, usually ministries.
- Systems integrators, the most prominent of which is the MEI-backed JiTong Corporation.
- Suppliers of the databases, such as the State Information Centre.
- Service suppliers—for example, there are currently over 100 Internet service providers in mainland China.

Developments are being driven by trialand-error and trial of strength, which, unlike in the west, rarely involve zero-sum games but more usually involve bargained outcomes.

There is a second international bargaining level. This works all the way down from pressures from U.S. and other trade negotiators, and the bargaining that takes place with multilateral organizations such as the WTO, the World Bank, and the IMF. It also includes negotiations with overseas equipment suppliers over foreign state-backed soft loans, vendor credits, technology transfer issues, and joint-venture and management issues, as well as entry strategies of overseas corporations wanting to gain access to China's growing services markets. The range and scope of bargaining has widened with the devolvement of financial responsibilities and purchasing decisions to the PTAs since the early 1990s.

This has not, however, simplified the entry process. On the contrary, entrants to China's telecommunications markets are now required to maintain head-offices in Beijing and representative offices in one or more provincial capitals. In addition, these companies must deal with numerous vertical layers of central and local state bureaucracy and enterprise, as well as a broad horizontal range of ministries, commissions, and other interested parties. On the one hand, this

For policy decisions to be made, a lengthy process of bargaining is involved, and the key question is how to get the issue to the top of the State Council agenda.

4Q97 Page 5

allows for widening business opportunities; on the other, it involves more time for negotiation and due diligence.

Managed Competition

Negotiation in China is essentially an endless process. In the west, negotiations can be confrontational but decisive and conclude in a commercial contract which has been put through the shredder of corporate lawyers. In China, negotiations can be ritualized and frequently conclude with an agreement—at least as far as the Chinese are concerned—to work together, but problems and difficulties will be negotiated as they arise in accordance with illspecified criteria. This is not perversity on the Chinese side, although the Chinese have learned very well how to keep the pot from ever boiling over. It is a genuine reflection of how the bargaining process works within the Chinese culture, and it is a guaranteed method of keeping options open with foreigners in areas where uncertainty prevails. And, in China's telecommunications sector, there are many uncertainties ranging from policy making to the choice of technologies, from business plans (where's the revenue coming from?) to commercial and contract law.

Over and above these endemic problems is bargaining-policy positioning by the State Council and the MPT. It can be called "managed competition": In short, China manages the market, and foreign companies compete to get into it. This explains why so many foreign companies complain in bewilderment that China is such a large market, yet they can't make money from it! For example, on November 8, 1996, the Hong Kong Standard quoted an assistant to the vice president of Shanghai Bell as saying, "The competition is much more severe than in other countries. Some of our prices are now only one-third of what you see in other countries." This is telling. Switches now cost less than US\$60 per circuit in China, and that implies that even if only 50% of switching capacity is connected to subscribers' premises, total line costs are

less than US\$800, and that allocates all overhead to line costs.

We began by suggesting that the view that China could not hope to achieve its build-out plans without resorting to FDI was wishful thinking. Often, the rule-of-thumb cost for a connected local exchange line is between US\$1,200 and \$1,500, but this ignores the fact that, starting from such a low base, China can use the most costeffective technologies. An estimate made in 1992 by David P. Reed1 suggested that a modern electronic, digitally-switched and transmitted network need only cost US\$690 per local loop line, and China is right in line with this estimate. (When rural penetration rates surge, the overall average network costs will change, but it probably makes better sense to view and cost each provincial network separately. From an investment point of view, this is certainly true. The targets for the year 2000 are penetration rates of 30 to 40 phones per 100 population in the major urban centers and an average of 10 phones per 100 population across the whole of China.)

The Future of the Bargaining Model

As China steps into the information age, high on the list of priorities are information systems which provide the party and government, state enterprises and banks, farmers, and China's rising middle classes with economic intelligence, trade and industry data, and market signals. The opportunities for telecommunications, computer, and information technology firms to provide equipment and components, build networks and integrate systems, design databases and search engines, offer services and access to services, and provide finance, management, and consultancy will be enormous.

Whatever disappointments have dampened the spirits of overseas companies to date, these opportunities will bring them flocking to the bargaining table, seeking domestic partners with local influence to further open the doors. Nevermind that information will be the very last frontier to

An estimate made in 1992 by David P. Reed suggested that a modern electronic, digitally-switched and transmitted network need only cost US\$690 per local loop line, and China is right in line with this estimate.

have the doors flung open, competition will be fast and furious. China will prosper, especially if China manages to ride the learning curve through the transfer of technology and management skills. Without that, China simply cannot afford to open its doors as the WTO and U.S. Trade Department officials would like. That is the endgame for China, and that is what the highest level of bargaining is about.

To supervise the bargaining game, at both the domestic and international level, in 1996, the State Council upgraded the status of the National Committee for the Informatization of the Economy to a leading group. There has been discussion of it being upgraded further to a state commission that would become the overall policy maker for telecommunications and information technology, but outside observers always compress the time scale on which China's bureaucracy works. It is, after all, a bargaining process and not simply a decisionmaking process. The leading group has 20 members, is chaired by a vice-premier, and is comprised of representatives of all the primary interest groups from state commissions and ministries. So far, it has determined, in documents not yet made public, that the information infrastructure shall be as protected as telecommunications from foreign influence or control.

This does, however, leave open the question of what China will give in the bargaining game. To date, it has not been required to give much at all, just a window of opportunity to foreign equipment suppliers and carriers wide enough to catch them elbowing past each other to get to the negotiating table. At the APEC Ministers meeting in Manila in 1996, China gave hints that it was considering opening its valueadded services (VAS) markets to foreign participation without committing to equity investment. It made no mention of valueadded network services (VANS), and the presumption must remain that network management will remain off bounds.

In 1993, State Council Document 55 established "provisional" measures for the liberalization of VAS such as EDI, e-mail,

audiotext, videotex, and other information services. Radio mobile communications were separately listed as requiring a license from the MPT, but would logically be deemed VANS rather than VAS unless resale services are envisaged. The trial use of foreign investment in joint ventures was decreed by the MPT in 1994 whereby foreign investors would participate in operating profits according to their proportion of investment, but here the valuations placed upon assets would be a problem. In 1995, the Ministry of Foreign Trade and Economic Cooperation classified foreign investment in telecommunications "operation and management" as prohibited, but some observers saw this as leaving open non-equity options.

The Final Step?

Will China take the final step toward FDI in the telecom sector? There are certainly pressures in that direction. Around the domestic bargaining table, there are players who would welcome FDI for the finance, technology, and management expertise it brings. Unicom is one obvious candidate. Some of the PTAs are also interested. Many China enterprises are certainly interested, and maybe even some work units within the PLA. The international bargaining table is full of such pressures. As long as China can rely upon alternative modes of raising the capital and gaining access to technology and know-how, these pressures are largely resistible, not least because there are plenty of carrots that China can dangle before foreign noses.

The more realistic question is how China will experiment with different forms of foreign participation, which will ultimately lead to FDI. Many observers are putting their faith, wrongly, in the drafting of a telecommunications law. The MPT has been under pressure from its domestic competition to separate its roles of policy maker, regulator, and operator, and in so doing, the MPT will be forced to take a more codified position on what foreigners can and cannot do. But the MPT has been most successful in forestalling any such law, and it is most

As long as China can rely upon alternative modes of raising the capital and gaining access to technology and know-how, these pressures are largely resistible.

4Q97 Page 7

In mobile communications, China is a rising star and cashcow rolled into one. unlikely to see the light of day before 1999. In the meantime, the MPT has room to maneuver, to allow semi-official concessions to overseas companies to enter gray areas between loan finance, equipment supply, management consultancy, and arms-length joint venture participation in operating revenues. These areas have mostly involved paging and trunk radio and some cellular mobile operations. A high-technology broadband network for videoconferencing in Guangzhou was permitted but, once the technology transfer had taken place, the operation seems to have stalled.

In August and September 1997, China cut over its 100 millionth telephone exchange line, well on its way to its 2000 target of 170 million. In the provision of basic services, China has few difficulties, except for increasing the successful call rate and boosting revenue generation through greater usage. In mobile communications, China is a rising star and cash-cow rolled into one.

Where China is weakest is in developing high-technology applications, especially in high-speed data processing, networking, and multimedia. Directly or indirectly, China needs to finance development in these areas, so the pressure to experiment is a given. We should therefore watch for the experiments, not the big breakthroughs, and anticipate more of the managed competition model that has worked so successfully for China.

In short, foreign companies need to push aside wishful thinking, rely more upon their own good homework, and face the facts: China's bargaining model is telecommunications with Chinese characteristics.

Page 8

¹ D. P. Reed, *Residential Fiber Optical Networks: An Engineering and Economic Analysis* (Boston: Artech House, 1992).