

## **China Deals: Tracking Deal Strategies and Patterns of Investment in the Chinese Telecommunications Market**

**Tony Lim**, *Master's Candidate, Technology and Public Policy Program*

**James E. Short**, *Visiting Scholar, Sloan School of Management*

China's entry into the World Trade Organization (WTO) in December 2001 lent speed to an ongoing series of market reforms that has opened up the massive Chinese domestic market to the world. The idea of China selling its products and services freely in global markets in exchange for opening up its own growing domestic market of 1.2 billion people is a staggering one, demanding business decision makers to have a comprehensive understanding of China's unique, and changing, investment landscape.

The research reported here centers on a comprehensive understanding of telecommunications business venturing in China. Our focus was on identifying and analyzing patterns of deal-making between multinationals and Chinese technology partners, including a detailed analysis of strategies motivating investments in the Chinese domestic telecommunications market. To accomplish this, a new and unique dataset was constructed. Data was collected on all publicly-reported deals in China published in English language business reporting services, including the *China Business Review*, *Reuters*, *Investext*, *Dow Jones*, and *The Economist Intelligence Unit*. Objective data on deal attributes was matched with subjective and evaluative data on strategies and expected deal significance. By performing content analysis and statistical analysis on the data collected, results were obtained regarding the investment orientations of two companies, UTStarcom Inc. and Nortel. Three investment orientations - cost-minimization, domestic market-driven and joint market development - were studied.

We found that significant differences exist in the objective and subjective attributes of telecommunications business deals in China. Both UTStarcom and Nortel exhibited all three investment orientations, including joint market development. The latter strategy is emerging and beginning to influence investments into Sino-foreign partnership opportunities. There is a decreasing trend in the number of Sino-foreign import contracts and an increasing trend in Sino-foreign export contracts in telecomm. These results point to the emergence of Chinese telecom companies that compete strongly in the Chinese marketplace and in international markets. Three business drivers were identified from the deals studied, along with possible risk-bearing changes that could result from policy changes in China. These are reported in the full report. Further, the specifics in tracking deals are described and the implications of our findings from business and policy perspectives are discussed.

### **A Snapshot of Telecommunications Deal-Making in China**

We addressed the following questions: What are the identifiable patterns of business venturing by foreign companies in the Chinese market? How are patterns characterized and to what extent have patterns been guided by China's domestic policies? How do foreign firms position themselves for the challenges posed by emerging Chinese multinational companies and by technology transfer? How do foreign companies employ differing investment orientations in their Chinese business deals? How can the study of telecommunications investments offer insights into emerging technology markets in China? And what lessons can China deals offer to developed and developing markets?

### **The Chinese Investment Landscape**

According to *The Economist* (2004a), during the past three years China has accounted for one-third of global economic growth (measured at purchasing-power parity), double that of the United States. In 2004, China's official GDP growth rate rose to 9.7%. And this may underestimate the true rate,

which some economists believe is as high as 13%. In 2003, China consumed 40% of the world's output of cement and accounted for 33% of growth in global oil consumption, and 90% of the growth in world steel demand.

The investment landscape in China's technology markets is unique in many ways. Here are four examples:

1. The rate of change is extremely rapid. Many policies and reforms have been introduced to address issues like protecting intellectual property rights, introducing transparency into corporate governance, and raising domestic multinational companies. The WTO commitments have fuelled and will continue to fuel changes in these markets.
2. The volume of investments into China sets the country apart from other emerging markets. In 2003, the total value of imports and exports was \$851 billion and the total contracted foreign direct investment in China was \$115.1 billion (*National Bureau of Statistics of China, 2004*).
3. The Chinese government has favored cautious and gradual reforms over shock models that have been employed by other planned economies. The evolving investment landscape in China offers a study into such an alternative approach to economic reform. In addition, China has introduced competition into its technology markets without adopting the conventional wisdom of accompanying privatization. What happens in China will determine whether such a model is feasible in the long run.
4. Chinese companies are swiftly gaining visibility internationally. The Chinese investments abroad are growing as Chinese domestic companies grow stronger. In recent years, power brands have emerged in China and these domestic champions have begun to step into global markets to compete with more established names. Chinese computer maker Lenovo, which had 2003 revenues of \$3 billion, grabbed world business headlines when it acquired IBM's personal computing division for \$1.25 billion in December 2004. The deal promises to propel Lenovo onto the

international stage as the world's third largest PC manufacturer, behind Dell and Hewlett-Packard. TCL Corp., with \$3.4 billion in revenue, has demonstrated its power by signing a deal with France's Thomson to merge their television businesses. TCL also took control of Alcatel's cell-phone business in 2004. Other Chinese power brands include \$10 billion home appliance maker Haier Group, consumer electronics retailer GOME, and telecommunications manufacturer Huawei Technologies.

### Investment Strategies Compared

Investment deals motivated by cost minimization goals reflected the first investment orientation studied. The objective of a company is to increase profits, which can be achieved by increasing revenues or decreasing costs of production. By engaging in business ventures that establish production facilities in a developing country such as China, companies can lower their factors of production significantly. Such factors include cost, capacity, expertise, and quality among others. Subsequently, the products that are manufactured in developing countries can then be exported to home markets and sold for larger profit margins.

China's cost of labor is much lower than Malaysia and Thailand and comparable to that of Indonesia and the Philippines. Similarly, land prices and rent in China are comparatively low. In addition, the State government has implemented tax incentives in many regions to promote development. For example, according to Fung, Lau and Lee (2004) within special economic zones, foreign-invested firms are taxed at a 15% rate instead of the general 33% rate. Firms with a contract term of more than ten years pay no taxes for the first two years in which they make a profit. For the subsequent three years, the tax rate is reduced by half to 7.5%. The same rules apply to foreign-invested firms located in open coastal cities and economic and technology districts.

The second orientation is market-driven, where foreign companies conduct business ventures in China in order to gain access to a potentially large market. Fung et al. (2004) found that U.S. firms invest in China primarily to establish a beachhead to penetrate the large and rapidly growing Chinese domestic market. In 1995, U.S.-invested firms in

China sold 84.5% of their output to customers in China and exported only 8.4% of their output back to the United States. The team also found that most U.S. direct investments were concentrated in the provinces of Jiangsu, Shandong, Liaoning, Guangdong and Shanghai, which had the relatively high per-capita incomes, retail sales of consumer goods, and average monthly wage rates. Fung and his colleagues argued that this suggested that the focus of U.S. direct investment is the potential size of the local markets rather than the low levels of the local wage rates.

The third and final orientation has foreign companies partnering with Chinese companies to jointly develop products for international markets. Here, companies based outside of China enter into partnership with Chinese firms in order to leverage their expertise to jointly stage competitive entry into international markets outside of China. China's gradual opening of domestic markets to foreign entry has ushered in a high degree of technology transfer to local companies that partnered with foreign companies in joint ventures. Since Sino-foreign joint ventures have been in China for more than 20 years, we expect some domestic companies to have developed expertise and capabilities in the market. With the support and backing of the state government, such companies are able to build innovation on top of the transferred technology to develop competencies that enable them to compete internationally.

### Identifying and Analyzing Deals

We defined a business deal to be synonymous with a business venture, where both refer to transactions between two or more companies. These transactions include contracts, joint ventures, partnerships, memorandums of understanding (MoU) and other agreements that occur in the telecommunications industry. We considered business ventures involving at least one Chinese company and another company based outside of China. Alternatively, two or more foreign companies could conduct a business venture together based in China. Such Sino-foreign business deals can be import or export deals from the perspective of China.

We developed a unique dataset and research methodology to progress our work. We built three analysis databases: (1) a database of Sino-foreign telecommunications business deals from 2002 to 2004; (2) a *Disclosure* database that comprised

business news articles, analyst reports and government filings pertaining to the two case companies – UTStarcom Inc. and Nortel; and (3) an integrated deals-centric dataset that comprised 902 business news articles reported on 114 specific deals by UTStarcom and Nortel. We then refined a statistical approach to analyze the content of deals and patterns of deal flow.

We developed three hypotheses regarding objective and subjective deal attributes, as well as investment orientations. Based on the research findings, we found that a variety of objective deal attributes exist to define and differentiate business deals. These attributes included time of agreement, deal participants, deal value, geographical location and product line. Significant differences existed along these attributes for the 114 deals in the database.

We used content analysis to test whether significant differences existed between expected outcomes of Sino-foreign business deals. That is, in reporting the attributes of deals made (as reported by either the parties themselves or the business press), we compared the strength of optimism in expected outcomes between the parties and the market. We found statistically significant differences between how companies reported deals, the time period of expected outcome, the product line(s) involved, and in the optimism of individual deals to generate expected outcomes.

Finally, on the basis of the data collected regarding deals and deal disclosures, we found evidence supporting the conclusion that UTStarcom and Nortel utilized all of the hypothesized investment orientations in their investment deals; cost-minimization, market-driven, and joint development. However, expectations of outcomes, including near term and mid-term benefits, differed in both the reporting of deals and in the market's evaluation of deals.

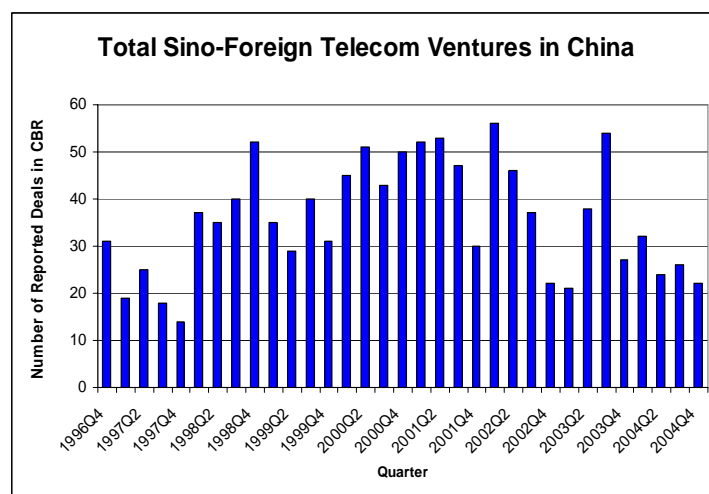
In addition to the hypothesis tested, a number of inferences and conclusions were made about the quality of business reporting in China (both English language and Mandarin). We observed that there is sparse reporting of China business deals in telecommunications in leading, international business publications used for both business and academic research. It was found that the China Business Review and the Economist Intelligence Unit, for example, reported less than 51% and 65% of business deals for UTStarcom and Nortel respectively. Simply stated, about half of

telecommunications deals in China are not reported in the major English language business news / data services.

## Conclusions

Centering on technology venturing in the telecommunications sector in mainland China, this project identified and analyzed patterns of deal-making and deal strategies motivating business investments in the telecommunications segment in mainland China. Three investment orientations – cost-minimization, domestic market-driven and joint development - were defined and empirically analyzed. Data was collected on all publicly-reported deals in China, published in English-language business reporting services including the *China Business Review*, *Reuters*, *Investext*, *Dow Jones*, and *The Economist Intelligence Unit*. Objective data on deal attributes were matched with subjective and evaluative data on strategies and expected deal significance. By performing content analysis and statistical analysis on the data collected, results were obtained comparing the investment orientations of two companies, UTStarcom Inc. and Nortel, in mainland China.

We found that significant differences exist in the objective and subjective attributes of telecommunications business venturing in China. UTStarcom Inc. and Nortel exhibited all investment orientations, including the emerging joint development orientation that is emerging and starting to influence investments into Sino-foreign partnership opportunities. We also found a decreasing trend in number of Sino-foreign import contracts and an increasing trend in Sino-foreign exports in telecoms. Our results underscore the emergence of Chinese telecom companies that compete strongly in the Chinese marketplace and, increasingly, in international markets. Our findings suggest strongly that business decision makers in technology markets must have a comprehensive focus on China's unique, and changing, investment landscape, to more accurately gauge the expected outcomes in China deals.



**Figure 1:** Total Sino-Foreign Telecom Ventures in China, 1996 Q4 to 2004 Q4

**ABOUT THE MIT CENTER FOR EBUSINESS**

Founded in 1999, the Center for eBusiness is the largest research center in the history of the Sloan School. We are supported entirely by corporate sponsors whom we work with closely in directed research projects. The Center has funded more than 45 Faculty and performed more than 60 research projects. Our mission is to join leading companies, leading educators, and some of the best students in the world together in inventing and understanding the business value made possible by digital technologies. Our interactions are a dynamic interchange of ideas, analysis, and reflection intended to solve real problems.

**Examples of Current Focused Research Projects:**

- Implications of e-Commerce for New Services and Structure of Logistics Systems
- How Do Intangible Assets Affect the Productivity of Computerization Efforts?
- Wireless and Mobile Commerce Opportunities for Payments Services
- Benchmarking Digital Organizations
- The Impact of the Internet on the Future of the Financial Services Industry
- Pricing Products and Services in the High-Tech Industry

The Center for eBusiness has recently entered into Phase II, focusing more explicitly on business value, while at the same time including technologies beyond the Internet (e.g. RFID) in its purview. Our goal, in part, is to reduce that timeline through basic and applied research, engagement with industry sponsors, and the sharing of best practice, and the MIT's credo of combining rigor with relevance is well served.

We are co-located with MIT Sloan's Center for Information Systems Research and the Center for Coordination Science to facilitate collaboration. Our cross-campus collaborations include work with the Media Lab, AutoID Center, Computer Science and AI Lab, and Communications Futures Program.

Please visit our website for more information.



We are organized into five areas of expertise – or Special Interest Groups:

1. **Productivity**
2. **Trust and Customer Advocacy**
3. **Communications Futures**
4. **Interdependence of Security and the Extended Enterprise**
5. **IT Products and Services**

**Founding Sponsors**

BT  
Cisco Systems  
France Telecom  
General Motors  
Intel  
UPS

**Research Sponsors**

CSK Corporation  
Suruga Bank  
University of Lecce  
Worldwide Business Research

**Member Sponsors**

Amazon  
PricewaterhouseCoopers  
Publicis Technology  
SAS

**CONTACT INFORMATION**

MIT Center for eBusiness  
MIT Sloan School of Management  
3 Cambridge Center, NE20-336  
Cambridge, MA 02142  
Telephone: (617) 253-7054  
Facsimile: (617) 452-3231  
<http://ebusiness.mit.edu/>

David Verrill, Executive Director  
Erik Brynjolfsson, Director  
Glen L. Urban, Chairman  
Steve Buckley, Associate Director  
Meredith Sampson, Financial Assistant  
Carlene Doucette, Executive Assistant