Science&Technology

<u>China's Military</u> Great Leap Forward?

Ming Zhang

China does not foresee any threat of a large military invasion of its territories in the near future. Nor is it preparing to engage in any major military conflicts overseas. Yet China is concerned with non-conventional security threats. Consequently, it has moved towards building comprehensive national strength centered on science and technology. What is the nature of the security environment perceived by China? Is China strong enough to defend against these perceived nontraditional security threats?

While China has made a sound choice to base national security and development upon science and technology, the development of that very science and technology has posed formidable challenges that China has found hard to meet. Becoming a strong science and technology state has been China's dream for at least a century. While the government has stated this goal explicitly, critics of such a policy have not remained silent and success in achieving such a state will not be spontaneous but will depend on a realistic strategy. China's search for new security boundaries is only just beginning.

New Security Threats. While traditional geopolitical objectives, such as reunification with Taiwan, continue to be key components of China's national interest, other non-

Ming Zhang is with the Asia Research Institute and has anthroad three bools and normizous other normic and security policy. conventional, non-military factors have also topped Beijing's security agenda as it enters the new century. Increasingly exposed to the outside world and strongly driven by new economies such as information technology, China senses the mandate to redefine its concept of security.

Natural Resource Security.

"Resource security is of utmost significance to China," warns one official anahyst." In 1993, China became a net petroleum importer and bought 9.2 million tons of crude oil from overseas. In 2010 and 2020, it will import 260 million and 320 million tons of oil, respectively. Some 30 to 40 percent of Chinese domestic petroleum demand will have to be met by imports. Petroleum storage has also become an issue. Compared to the U.S. stockpile of ninety days worth of petroleum and Japan's sixty-day supply, China's petroleum stock can last only a week."

China's total water resource volume is 2,800 billion cubic meters, ranking fourth in the world. Its water resource per capita, however, is only 2,300 cubic meters, about 26 percent of the world average. Water sources, plentiful in the south and scare in the north, are spread unevenly in China. A Chinese analyst points out that 300 Chinese cities were short of water in 1996—120 seriously so. Partially as a result of drought, 60 million rural citizens are living under the poverty line; many escape poverty only by migration. Nationwide, water shortage has led to production suspension and losses amounting to millions of dollars annually. Because of the water shortage, friction among local administrations, regions, ethnic groups, and the

national government occurs, jeopardising national political stability.¹

When natural resource security is defined by quantity, diversity, and availability, China faces problems from both within and without. China's economic growth is virtually impossible to sustain absent sufficient resource supplies.

Finantial Seturity. One Chinese analyst identifies the following key indicators in determining a country's financial influence: the acceptance of the country's currency worldwide; its amount of foreign exchange reserves; the scale of its domestic financial markets; its international financial centers and degree of financial influence; and the size of the financial influence; and the size of the financial influence; and the size of GDP. China is not financialby strong by these criteria save in foreign exchange reserves, holding \$155 billion in 1999, second in the world.⁸

Indeed, financial risk has become a real izue in China. Illegal financial conduct, bad debt, and the integration of China's domestic market within the international financial system have all forced China to the brink of a financial crisis. China was largely unaffected by the 1997–98 Azian financial crisis because it was a closed financial entity. Yet China's financial health was even worse than that of its Asian neighbors. Rampant corruption at every level from top leadership to local officials has left millions of Chinese yuan and foreign currencies unaccounted for. Arrest and execution of high level officials and the shutdown of major financial institutions have solved little. The system still waits to be transformed.

Externally, China's financial security is a long-term concern. China needs to ready itself to compete with its foreign counterparts in order to reduce the impact of international financial turmoil. China still does not understand modern financial market operations, financialproducts, and management.

Information Security. Since the late 1990s, information security has become the top national security issue in China. Chinese President Jiang Zemin called on the whole nation to view the arrival of the era of the "knowledge economy" both as a challenge and as an opportunity. In June 2000, prominent figures in the General Equipment Department of the People's Liberation Army (PLA) and the Xinhua News Agency published an edited volume, *Jushus Kini Shiki* (Winning in the Momention In particular, China needs to defend itself against "information colonialism." With the uneven development of information technology (IT) in the world, some countries have emerged as the dominant players in the market. According to current Chinese thinking, by monopolising information resources and industries, the advanced IT countries are attempting to penetrate, control, and dump products in those countries that are relatively backward. Information colonialism can achieve the same objectives that political, economic, and military actions could in the past.¹

Despite the rapid growth of Internet users, China does not have an indigenous IT industry. Its computer capac-

China is not in a strong position to defend its information security.

Age). This book elaborates on the powerful shock and enormous impact the information and electronic industry has had on world politics, economics, society, and national security. The book is a testament to China's paramount concern about information security.¹

In the traditional Chinese national security paradigm, land, sea, and air were the "territories" to be defended. Now, the Internet has become a "fourth territory." In the Internet era, China's economic, political, and cultural sovereignty, and military security depend largely upon the effective administration of this fourth territory. Managing information is even more critical than managing flows of petroleum resources and is of the same strategic importance as air, sea, and land defense. National security is incomplete without sovereignty in the fourth territory.¹ ity is only 8.6 percent of that of the United States. Moreover, 70 percent of China's IT companies were facing bankrup toy or had to merge with other companies in 2000.⁵ China is not in a strong position to defend its information security.

The Search for New Security Boundaries. How does China respond to these new security threats? The Chinese government's answer is to build comprehensive national strength with a primary focus on information technology. The Chinese Academy of Sciences (CAS), the top national science and security body, has put forward measures to increase China's strength in information infrastructure, life sciences, genetic engineering, and other areas of science and technology. CAS does not believe that high technology can be imported or transferred to Chinaespecially the latest high technology. China wishes to develop its own self-sustaining high technology sector. Its goal is to be one of the top ten science and technology states by the year 2010.¹

The best presentation of China's new strategy for incorporating science and technology into its new image of national security is made by Senior Colonel Huang Shuofeng of the PLA Military Academy of Sciences. A senior scientist, Huang identifies the following seven elements of national strength in his book Zonghe Guoli Xinlun (New Theony on Comprehensive National Strength):

-*Addinal straigth* political system, government quality, decision making and management, national cohesion, and political environment;

-Annumicstrugth—economic power, economic system, gross national product (GNP), and foreign economic trade relations;

-*Saina sultabulary (ScT)stragth* personnel quantity and quality, S&T investment, S&T equipment, and S&T system;

-National defense strength quantity and quality of defense forces, weaponry, defense science and technology, defense industry, defense concept, military theory, military organization, and military training;

- *Caloral and advantance's trangth*-quantity and quality of teachers, scope and structure of education, level of national culture and education, and impact of traditional culture;

- Delanatic straight—foreign policy, foreign activities, international stance and attitude, and international contribution; and -Rawne straight—natural resources, human resources, and information resources.³³

According to Huang, if the United States's comprehensive national strength is

100, Japan'sis 70.8, Germany's 66.9, Russia's 55.2, China's 44.5, and India's 29.1.

Huang makes seven recommendations to increase China's comprehensive national strength. First, he suggests establishing a national strategy of development and "general design headquarters" to coordinate the policy undertaking. Second, he recommends setting high information capability æ a goal by 2010 and concentrating on the development of electronic information technology. Third, Huang advocates establishing a strategy to build a strong China through science and technology. Fourth, he emphæises increæing China's overall scientific and technological invention capability. Fifth, Huang favors a national strategy to develop a knowledge-based economy. Sixth, he suggests building a strong army through science and technology. According to Huang, by 2010. China should possess the weapons system and military technology that will enable it to win a high-technology regional war. Finally, he would establish a democratic scientific decision-making process in order to reach the goal of sustainable development.

Clearly, China envisions science and technology, particularly IT, as the key to its comprehensive national strength. China was totally left behind when the West and other parts of the world entered the era of industrial revolution in the eighteenth and nineteenth centuries. Many observers point to this disconnect as the reason why the country suffered humiliation and invasion by strong powers from 1840 to 1945. They maintain that if China loses in the Information Age, the cost will be even greater than before.⁸

The IT revolution has particularly affected Chinese military affairs. Funda-

mentally, it was not warfare but the information economy that drove the Chinese military re-evaluation. Chinese President Jiang Zemin noted that developing the information economy and innovative thinking would be critical to China's development in the 21st century. He stressed that information is a key military factor in force building and warfare. According to Chinese military thinkers, high-tech weaponry is the most important product of the information economy, and future warfare will essentially be a test of China's expertise in information technology.¹⁸

Thus, China is determined to focus on science and technology, especially IT, in order to construct and defend new national security boundaries. Though IT is not the only security concern, it is an integral part of all new security issues. Therefore, it is the cornerstone of China's comprehensive national strength and security plans.

The Challenge of Science & Tethnology. China might be on the right track in seeking comprehensive national strength. Yet China has not been getting what it needs—science and technology. The level of science and technology in China is twenty to thirty. years behind the world standard. China's agricultural technology has not yet reached the U.S. level of the 1960s; the auto industry is barely at the U.S. level of the 1960*s*; *s*teel enterprises are at U.S. levels during the 1960–70s; rail transport technology is at the European, American, and Japanese levels before the 1960s; and management is more than twenty years behind. the advanced countries.*

The private marketplace has barely played a role in China's science and technology development.⁵ Only 0.91 percent of China's GNP was spent on Research and Development (R&D) in 1990; that percentage dropped to 0.64 percent in 1997. Developed countries spent more than 2 percent of GNP for R&D. Nearly 70 percent of China's R&D was financed by the government, whereas the same percentage was funded by the private sector in the United States and Germany.

How far is China from catching up to developed countries' knowledge economies? According to Chinese estimates, China's development is forty years behind the United States. Chinese experts argue that if the current U.S. development index (based on knowledge production, investment, storage, and flow) is 100, China is at only 26 percent of the American level. ⁵

Although many view it as the driving force behind the growth of comprehensive national strength, the development of IT has been plagued by various problems in China. These include limited investment sources (almost 60 percent of all funding comes from the government); irrational distribution of the funds (almost 60 percent of all funding is earmarked for government R&D institutions); low productivity of the technology industry; low rate of conversion and application of scientific and technological research; incompetent research personnel; low level of technological import and inventive capability; and low quality of national education.³³

China imports high technology, but it has had two problems in doing so. First, most of its budget is spent on equipment, while only 20 percent goes to wards technology. With key technology remaining in the hands of foreign companies, China's high tech enterprises cannot operate independently.[§] Second, æ observed by a U.S. specialist, even if China acquires advanced technology from overseæ, China's civilian infrætructure is incapable of efficiently absorbing or converting it for Chinese use. China remains weak in human capital, technological discipline, incentives, and institutions needed for technological progress.³⁵

All these challenges have posed serious questions about China's strategy for comprehensive national strength. More accurately, there are fundamental obstructions at the operational level of implementing this new national strategy that Chinese experts and authorities have noticed but may never tackle. First is the centralised science and technology development system. While China perceives science and technology as the key to a strong state, the central government has not undertaken comprehensive IT development on a national scale. Rather, the government has confined R&D to its affiliated institutions. One reason for such an approach is the central government's lack of trust in local actors and the private sector. Another reason is that China has had a few confidencebuilding successes in concentrating resources on "national projects," such as missiles, satellites, and nuclear weapons. On the whole, a centralized science and technology system will not provide China with a truly comprehensive national strength, but rather partial and limited achievements. The market must play a dominant role .

Second, despite its ostensible enthusiasm, China has not consistently invested in science, technology, education, research, and development-elements that constitute a basic infrastructure for the energy, transportation, information, finance, and environmental sectors. This is a key reason why China continues to fall behind other developed countries. As a byproduct, "brain drain" is perhaps inevitable when China opens its door to the more developed world, and the situation will worsen if Beijing provides only lip service to science and technology. Incentives for both institutional and individual development must be in place.

Third, national pride and honor rather than practical necessities often take precedence. What does "among the top ten science and technology states in the world" really mean for China? Chinais fond of reminding the world of the many things it developed "first," and yet, for the past hundred years, it has contributed little to scientific and technological development. The Chinese government is still allowing self-set objectives to trump sustainable growth and effectiveness. In the end, China prides itself on past science and technology breakthroughs, leaving the current science and technology gap with other countries unchanged.

Rethinking China's National Capabilities and Goals. China's science and technology-centered strategy for comprehensive national strength is poised to be the general guideline for Chinese national security over the next few decades.

At the same time, critics of this strategy have made their voices heard in China. In an article entitled "Refusing to Catch Up," Mao Yushi lays out alternative strategies. He points out that all provincial and urban development plans in China focus on new high-tech industries. Mao calls this "unacceptable and misleading." Rather, human and natural resources should be invested in consumer goods demanded on Ghina's market. "It is unrealistic," Mao Yushi writes, "to imagine that our country can surpass others in all fields." In order to reach the consumption level of other developed countries, Ghina should depend on traditional industry rather than new high technology, he argues. His bottom line is that rather than forcing the development of a high-tech economy at the expense of other sectors, the government should allow the market to allocate resources and create a balanced economic structure.⁸⁵

Mao Yushi's provocative article sharply contrasts the official state strategy for national development. It criticises the leadership's mentality as a case of old Chinese "catch-up fever."

In military affairs, Qiao Liang and Wang Xianghui, two senior Chinese colonels, produced a widely commented-upon book, Chao Man Zhan (Warfara Byond Rules). With regard to science and technology, the book argues that developing cutting-edge weapons could cause economic collapse. It warns that China should not spend itself into bankruptcy to fight battlefield wars with high-tech weapons. Instead, according to the authors, China could fight with whatever means it has, both military and nonmilitary. It could, for example, engage in "asymmetrical warfare" to strike against vulnerable IT targets such as data networks. Qiao and Wang argue that China should not follow the Western path in either developing weaponry or respecting the rules of war. 🕷

One positive aspect of a rapidly changing China is that the government is not trying to silence every different opinion on national development, especially those concerning economic and security development. Consequently, this vigorous debate is open even to the outside world. Is China a strong power in the world? How fast can China develop? Is China's security environment satisfactory? Is the United States containing China? All of these issues have been debated in China at both the public and official levels.¹⁶ China's search for new security boundaries to fulfill the dream of a strong science and technology state is just beginning. China still does not seem to have a clear answer.

Does the United States have an answer, or at least the knowledge of what is really going on in China? Many think so, but an accurate understanding of Chinese national security is a more complicated task than most acknowledge.

Over the past ten years, there have been many titles on Western best-seller lists dealing with China, addressing subjects from Chinese military threats to the collapse of (and rise of a new) China. These works contain great hypo theses and predictions indeed. Forward thinking is valuable, but a serious reading of the basic elements of Chinese national security today and how each element will evolve tomorrow is indispensable. While Americans have reached many conclusions about Chinese national security today and in the future, the Chinese are still debating.

Without a full understanding of the situation in Ghina, it is irresponsible to come up with policy recommendations. What this research suggests is that Ghina is redefining its security boundaries, which are not merely defined in traditional geopolitical terms. The best possible defense perceived by Ghina is comprehensive national strength. It would be premature to determine whether or when Ghina will become a strong science and technology state. It would be a strategic mistake for the United States to unilaterally set the stage for information warfare, which may never occur between it and China. As China searches for its new security boundaries, it shares with other countries its

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3 Zhao, "Zhongguo Misnlin de Jingji Anquen Mensi" 32.

4 Hu Jian, "Zhengrue Yin Zengajang Jinwang Shili," ("China Should Increase Financial Poyer", Yanggo Guging Gugi (China Maipud Candidansant Sengel) July 1999): 1.

5 Wang Zhiputen, Li Changnesi, and Jian Yan, eds., Jurshny Xini Malai (Min in the Japanesian Age) Beijing: Xindaa Payes, 2000).

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8 Margoro Sinai Bao (China Information Mens) 21 April 2000; Margoro Barnin Bao (China Informere Mens) 28 April 2000. increasing national security vulnerability. The reality is that the building of Chinese comprehensive national strength will likely result in further security interdependence as much as in future security conflicts.

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Bad Connections? Foreign Ownership of U.S. Telecoms

Alan Pearce

What is wrong with Deutsche Telekom (DT), France Telecom (FT), Nippon Telephone and Telegraph (NIT), and a host of other major international telecommunications and wireless companies? The answer is that none of them has become fully privatised like, for example, BT (formerly British Telecom) and Gable & Wireless (G & W). In other words, DT, FT, and NTT, along with many other state telephone companies, are still partially and even majority owned by their governments.

Why is this important? It is significant because legislation that was on the verge of becoming law in the 106th U.S. Congress would have had the effect of severely limiting the business flexibility and competitiveness of government-owned companies like DT and NTT. Indeed, the legislation's intent was to make sure that the Federal Communications Commission (FCC) refused to permit either company from acquiring U.S.-owned telecommunications-information-entertainment (TIE) companies that it licenses. This is because both DT and NTT, as well as many other telecommunications companies in Europe, Asia, and Latin America, are more than 25 percent government-owned.

Convergence, consolidation, competition, and globalization are the major characteristics of the burgeoning TIE industry. Yet foreign-owned companies that are not fully pri-

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President of Informa -Bon Age Economia, Inc. , a Washington , DC-based research and consulting farm. He yes forming Chief Economiz at the Ed-8m1Communications Commission; Chief Economiat of the House of Representa-Ever Talecommunica-Born Subcommittee : and Chief Economist and Senior Policy Adjacer and by Office of Tale common insticutions Policy, Ergenitage Office of the President .

vatized now fear that their business strategies could be frustrated by powerful U.S. politicians. They take seriously the threat that legislation which was almost enacted in the 106th Congress will be reintroduced in the 107th.

An objective analysis of the issues demonstrates that TIE companies currently controlled by foreign governments do not pose a threat to the global TIE market or to American firms in that market.

The Bill. Directed solely at "foreign government" ownership of U.S. telecommunications-information companies, The Foreign GovernmentInvestmentAct of 2000 was designed to prevent so-called "information age imperialism."⁴ The primary goal of the kill, introduced by Senator Ernest "Frits" Hollings, was to prevent the FGC from transferring wireless licenses to companies owned 25 percent or more by a foreign government. In order to put the proposed legislation on a "fast track," Senator Hollings added a rider to a year-end spending bill that included a ban on foreign government ownership of U.S.-owned telecom companies. An identical amendment to the appropriations bill for the Commerce, State, and Justice Departments had already been stripped. Although the "riders" were omitted from the appropriations bills passed before Congress recessed, the message was clear: There is wide support on Capitol Hill for legislation that prevents foreign governments from buying into American companies, even though the foreign governments in question are attempting to privatize as quickly as the capital markets permit.

[°] Senator Hollings said that he was glad he "advanced an important discussion about privatisation worldwide." He added that he would "continue to oppose" transactions such as the VoiceStream-DT deal.¹

The purpose of the current political hullabaloo is to derail Deutsche Telekom's proposed \$41 billion purchase of VoiceStream Wireless Corp. of Bellevue, Washington, one of the nation's leading wireless telecommunications companies. And because congressional opposition is bipartisan and broadly based, there are allegations that the politicians are suffering from zenophobia and jingoism, accusations that they strenuously deny.

The Holling's bill had broad bipartisan support in both the Senate and the House. Indeed, Senate Majority Leader Trent Lott, who is opposed to the "riders," initially supported Hollings and even co-sponsored a similar bill. Then, in an apparent change of heart, he went along with former Senator Slade Gorton, who represented the state in which VoiceStream is headquartered. According to *The New York Times*, VoiceStream executives contributed more than \$100,000 to the Gorton campaign and the Republican Party.⁸

In spite of the pre-election jockeying, senior Capitol Hill staffers say that the issue will not go away. Indeed, they predict that there is so much genuine feeling against foreign government control of U.S.-owned TIE companies that legislation will be taken up again early in the 107th Congress.

How It All Began. In July 2000, DT made a \$55.7 billion bid (the stock market collapse over the past eight months has significantly reduced the value of the deal) to acquire VoiceStream. At the time, DT was 58 percent owned by the German government. Almost as soon as the proposed acquisition was announced, VoiceStream said that in an attempt to become a truly national wireless carrier, it would buy Powertel Inc., based in the south east, for \$6.25 billion. This acquisition adds 727,000 customers to VoiceStream's 2.7 million users. VoiceStream currently serves markets that are home to about 75 percent of the U.S. population. With Powertel added, the combined company would expand its reach to 90 percent. Before its latest proposed acquisition, VoiceStream had acquired Omnipoint Corp., based in suburban Washington, DC, and Aerial Communications Inc. of Chicago. VoiceStream uses Global System for Mobile Communications (GSM), the same wireless technology standard that is dominant in Europe. By merging with DT, the combined company would have the ability to begin to compete globally. It is this potential for global coverage—and dominance—that apparently sparked the opposition on Capitol Hill.

U.S. law already states that a company that is more than 25 percent owned by a foreign government cannot æquire an FGG-issued communications license. The Commission also has rules requiring U.S. carriers to notify the FCC and to seek its approval before entering into affiliations with foreign carriers. Some might ask, "What's the problem?" The problem is that lawmakers are afraid that the Commission would assert its authority to waive the restriction if it believes that allowing the deal would promote the interests of U.S. consumers. Since this seemed likely, legislation was quickly introduced in both the House and the Senate.

The Hollings bill won quick support from Senator Lott, Senator Ted Stevens,

Chairman of the Senate Appropriations Committee, and Senate Minority Leader Thomas Daschle. A kill introduced in the House by Congressmen John Dingell and Ed Markey closely approximated Senator Hollings's bill. Congressman Markey, perhaps in order to stem criticism, protested, "It is not protectionist. It is not driven by xenophobia." He added that by setting limits, the measure gives foreign governments greater incentive to privatize." In a Wast*ington Rot* article, Congressman Markey was quoted as saying, "The German government has a significant stake in the success of one company in their country. As a result, they have a substantial stake in the failure of everyone elæ."[‡]

Key House Republicans also joined in opposing the merger, complaining that the Office of the U.S. Trade Representative (USTR) did not view government ownership of foreign telecommunications firms "as a priority." The House Commerce Committee Chairman in the 106th Congress Thomse Bliley, House Telecommunications Subcommittee Chairman Billy Tauzin, and Subcommittee Vice Chairman Michael Oxley, wrote "astrongly worded" letter to then-U.S. Trade Representative Charlene Barshefsky demanding assurances that she was committed to the "full and complete" privatization of foreign carriers, for example DT and NTT. The letter was triggered, in part, by the testimony of former Deputy USTR, Richard Fisher, before the U.S. Congrez on foreign ownership issues in telecommunications and, in particular, on the substance of related legislation.⁸

The somewhat frantic legislative activity in the 106th Congress prompted responses both in support of, and in opposition to, the House and Senate bills. The European Union warned that the legislation would violate U.S. commitments to the World Trade Organisation (WTO) agreement on opening up telecommunications-information markets and permitting foreign companies to invest in domestic carriers.³⁵ Both the EU and the Japanese government said in writing that they would challenge the legislation before the WTO if it ever became law.³⁵

Michael Noll, a Professor at the University of Southern California who testified in support of the legislation, "strongly" opposed permitting foreign government-owned companies from acquiring U.S. telecommunications-information companies. He said, "Many of these countries, including Germany, have not privatized, and the governments own substantial portions of the carriers' stock. It's simply information age imperialism... [Without such legislation] you're in exence allowing foreign governments to own public airways and public rights-ofway, and that's something national sovereignty says no to." Noll added that he prefers legislation that would ban foreign firms owned by as little as one percent by a foreign government from acquiring U.S. telecom licenses.

Both the Communication Workers of America and the U.S. Chamber of Commerce opposed the legislation. The Chamber of Commerce fears that, if passed, the legislation would violate commitments made in the Basic Telecom Agreement of the WTO and could possibly start a trade war.[§]

Perhaps in response to Congressional criticism, the German government wrote to the White House saying that the government stake in DT would go from 58 percent to zero, but did not specify how long that would take. German Chancellor Gerhard Schroeder's foreign policy and security adviser, Michael Steiner, assured then-U.S. National Security Adviser Sandy Berger in writing that Germany is committed to privatising DT and also to increasing competition in the telecommunications industry.⁸

The Japanese Government, for its part, announced plans to sell one million of its shares in the Japanese telecommunications giant NTT. Japan's Ministry of Finance owns 53 percent of NTT.

NTT has had its own problems with the U.S. government. Early in 2000 it agreed to buy Verio Inc., an Internet service provider and web hosting company, for \$5.5 billion, chump change by industry standards. The deal drewpolitical fire because of fears that it could present a foreign espionage riskby giving NTT access to U.S. wiretapping activities. The Federal Bureau of Investigation looked into the acquisition, along with U.S. Treasury, State Department, and National Security Council officials. The Committee on Foreign Investment in the United States, which monitors the effect of foreign investments on national security, found that NTT had satisfied U.S. concerns. President Clinton refused Congressional requests to block the deal after NTT promised that it would supplement Verio's operations policies and manuals with information on handling requests by law enforcementagencies, including security procedures to protect classified information.⁸

A second problem with NTT concerned the relatively high rates it charges competitors for access to its local network in Japan. Former U.S. Trade Representative Charlene Barshefsky averted a crisis when she negotiated an agreement requiring NTT to cut its rates for access by 20 percent over the next two years. The U.S. wanted an immediate 41 percent cut, while Japan proposed a 22.5 percent reduction phased in over four years.^{\$\$}

But no one on Capitol Hill raised a voice in protest when BT bought 20 percent of McCaw Communications, which at the time was one of America's three largest wireless telecommunications, without any form of official or independent regulation.

Most countries of the world have now agreed—willingly or otherwise—to adopt a U.S.-style model where nationalized companies will be privatized, although some more slowly than others. In addition to privatization, WTO member countries

Countries adopted a completely different model in bringing telecommunications and information services to their citizens.

tions companies. BT was richly rewarded for its investment when the company was later sold to AT&T (it is now known as AT&T Wireless). Gable & Wireless was also given quick U.S. government approval when it agreed to purchase the Internet backbone capacity of MCI after MCI had been acquired by WorldCom. Both BT and C&W were government-owned entities until the Thatcher Government began to privatize both companies in 1984. But as in all privatizations, the British government held stakes in both companies well into the 1990s. In the case of DT, the privatization started much later, though over time the German government's stake will diminish.

What is overlooked or deliberately ignored is that the vast majority of the world's countries adopted a completely different model in bringing telecommunications and information services to their citizens. While the U.S. decided to put its faith in the market, going initially with a regulated monopoly, AT &T, and then adopting the current system of regulated competition, most other countries had nationalised, integrated post, telegraph, and telephone administramust also establish new independent regulatory mechanisms where none existed before, permit competitive entry (including competition from foreign-owned companies), and agree to promote universal information age services.

What Should Be Done? With privatization, regulation, and competition being promoted throughout the world or at least among the 138 WTO Members—what is all of the fuss about? This question can be addressed on several levels. Is it wise to pass some sort of legislation dealing with government-owned foreign telecommunications firms in the 107th Congress? Is existing policy sufficient to encourage rapid privatization? Does the United States have anything to fear from allegations of "information age imperialism?" Will the globalization and consolidation trend in the TIE industry continue, regardless of what happens with U.S. politics and policy?

Is enacting legislation the smart thing to do? It would be unwise for the U.S. Congress to pass legislation along the lines of the House and Senate bills in the 106th Congress. It may also be foolhardy to re-introduce the legislation, æ is being threatened, in the 107th Congress.

Legislation, if passed and signed by President Bush, would merely invoke reprisals. Indeed, Rick Lane, the director of e-commerce and Internet technology for the U.S. Chamber of Commerce, fears that a bill would "severely curtail investment in the U.S. and possibly create a major trade war."⁵

Is existing policy sufficient to encourage rapid privatization? In a word, yes. Even though the legislative effort failed in the 106th Congress, there are still a number of U.S. policy obstacles to overcome before DT acquires VoiceStream.

The first obstacle is FCC review and approval or disapproval of all mergers and acquisitions in the TIE industry. The FCC is required by law to consider whether transfers of ownership are in the public interest. The Commission can also place restrictions on the merger in order to maintain a regulatory grip on the combined companies' scrutinized NTT's acquisition of Verio.

Competitors of VoiceStream can oppose the merger by filing with the FCC or with the Department of Justice Antitrust Division. If they are not satisfied by the public policy processes available to them, they can choose to file against the merger in Federal District Court, although this can be costly and time consuming.

For its part, the U.S. government can lodge a complaint with the WTO in Geneva. The WTO, which is just five years old, has never wavered from its commitment to full privatisation in the telecommunications-information industry. However, those privatisations must be given time to unfold because of the limited resources of many overseas capital markets.

"Is "information age imperialism" a real or imagined threat? Information age imperialism, if it is a threat at all, is much more likely to be a U.S.-cre-

Information age imperialism, if it is a threat at all, is much more likely to be a U.S.created phenomenon than a legitimate European or Asian threat.

operations. Even state-level regulators get into the public policy implications concerning mergers and acquisitions and can impose conditions if deemed necessary.

The U.S. government inter-agency task force known as the Committee on Foreign Investments, headed by the Secretary of the Treasury, must also examine the merger in order to see whether or not it poses any national security threats. It was the Committee on Foreign Investments that ated phenomenon than a legitimate European or Asian threat. It is a fact that U.S. companies are the dominant forces in the global TIE industry, with such dominance likely to continue well into the foreseeable future. It was the TIE industry, with its close ties to the Internet and the World Wide Web, that fueled the United States's economic resurgence in the 1990s. U.S. dominance is not limited to mega-corporations like Microsoft, Cisco Systems, AOL-Time Warner, Disney, AT&T, SBC Communications, Verison, WorldCom, and Yahoo. It also includes the growing demand from overseas TIE companies for American management skills. Indeed, Grahame Lynch, the Group Editorial Director of Advanstar Communications, noted, "As Western Europe and developed Asia liberalize, American telecom executives are in hot demand. Both incumbent and competitive carriers in many international markets are keen to bypass the often-bureaucratic bent of their domestic executive ranks and hire sawy Americans in their place."⁸⁸

All of this suggests that U.S. companies are more than holding their own in a complex global competitive environment, and that they do not need the protection of the U.S. Congress. Will globalisation and consolidation continue regardless of the xenophobic and jingoistic murmurings on Gapitol Hill? Absolutely. The next "foreign company scare" for the politicians might come from Japan. NTT DoGo-Mo Inc., Japan's largest mobile telephone company, is said to have designs on several U.S.-owned wireless carriers, including AT&T Wireless and Gingular, the newly created wireless venture of the BellSouth Gorporation and SBC Communications, Inc.⁸

So there is no problem to fix, and any potential concerns that could arise can be handled by the existing public policy expert agencies. As a result, the 107th Congress should back off. Xenophobia and jingoism have no place in U.S. politics, or in a modern, booming United States.

NOTE S

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3 "Communications Lotby Pus Full-Court Press on Congress," The New York Times 24 October 2000 : A.

4 "Takeoper Advances Under Hill Fire," The Weshingen Part 8 September 2000: E3.

5 "Takeoper By German Firm Tess Free Trade," The Wahington Pase 7 Sep tember 2000: Ex.

6 See Alan Pearce, "Curb That Xenophobia," Annia's Novark I November 2000: 28.

7 "VoiceStream Dest Could Clear Hurdle," WS Joby 27 September 2000 : 3B.

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