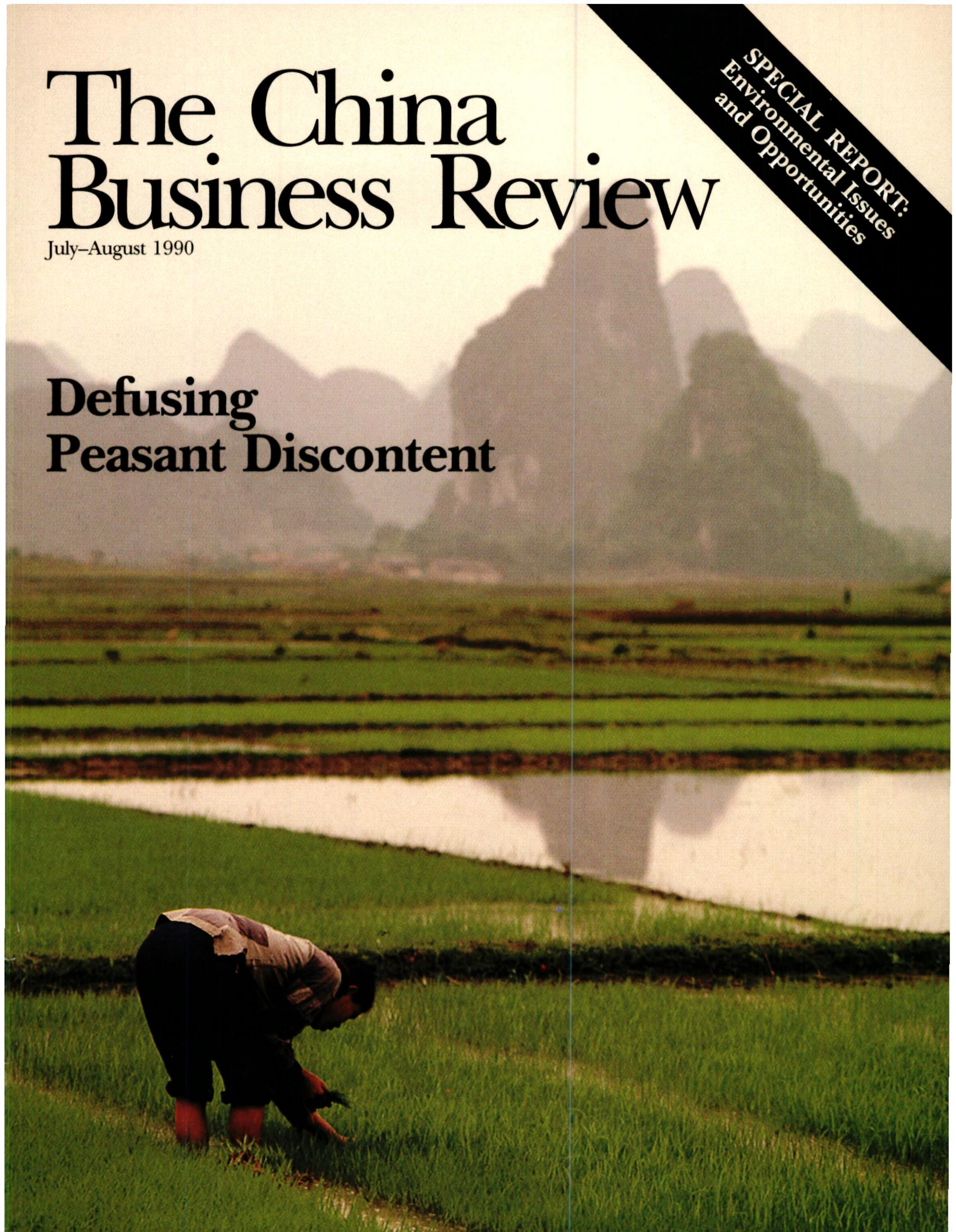
The China Business Review

July–August 1990

SPECIAL REPORT: Environmental Issues and Opportunities

Defusing Peasant Discontent



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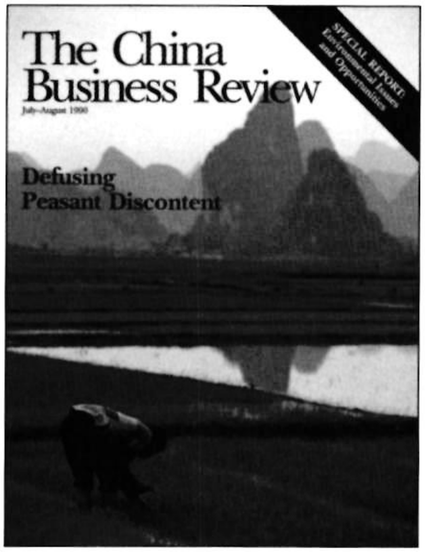

Agriculture is again being touted as the key link.
Photo by Dennis Cox

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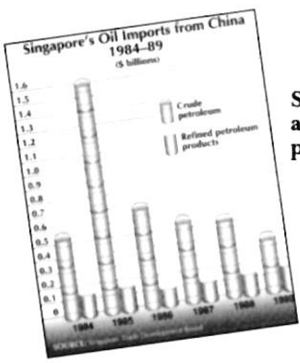

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Departments

摘要 Trends & Issues

World Bank Program Continues at a Crawl

Debate over the future of the World Bank's China program has intensified rather than diminished following the Bank's executive board meeting on May 29. The board approved a $300 million forestry project, but at the same meeting denied consideration of the Jiangsu transport project, largely because its scope did not fall within basic human needs (BHN) guidelines.

Only three other Bank loans have been approved since last June: the North China earthquake reconstruction project, a vocational and technical training project, and the Jiangxi agricultural development project. The approval of the forestry loan may be an indicator of the G-7's willingness to approve a broader range of projects meeting somewhat expanded BHN criteria. Expanding the definition of BHN to encompass projects that generate significant employment and lead to better economic conditions in poor areas of China—grounds on which the forestry project was approved—may have been required to maintain a united front among G-7 nations.

The World Bank's justification for continued lending to China is contained in its Country Economic Memorandum, released to the board on May 9. A careful reading of the report, however, indicates that at least some of the Bank staff have doubts about China's ability to continue with economic liberalization. One passage concludes that "The program adopted at the Fifth Plenum (November 1989) suggests that the problems that have emerged during the course of the reform can now be solved by the very same mechanisms—price control, unified material distribution, centered investment approach—responsible for the distortion that the reform was designated to correct." Yet the report concludes with a generally positive analysis of the economy, implying that China is still firmly committed to economic reform.

Such mixed signals, combined with political pressure over China policy in several G-7 countries, mean that close attention will be paid to each project proposal for the foreseeable future. The extension of BHN criteria indicates that the G-7 intends to allow the Bank to resume significant—albeit substantially reduced—lending to China. However, project approval is likely to continue at a snail's pace, with only those projects with distinguishable BHN components likely to be considered for approval.

—VL

MFN Battle Takes a New Turn

President Bush's May 24 decision to renew China's most favored nation (MFN) trading status for another year has not closed the book on the issue. Congress is holding hearings on MFN extension and may pass a resolution of disapproval, which would probably be vetoed by the President. Proponents of MFN renewal are trying to avoid such a scenario by focusing their efforts on the Senate, where it appears they may have a chance of convincing a majority to back the President. In that case MFN would definitely be renewed, but Congress could still attach conditions to the renewal process. Several measures proposing conditions are currently being considered in both houses.

For the business community, linking future renewal of MFN to specific events in China—such as the release of political prisoners—may in fact be tantamount to withdrawing it. Since the Chinese leadership is unlikely to respond to such conditions in the short term, both US companies and their Chinese business counterparts will conclude that MFN will be taken away next year, and will react accordingly. Much of the economic damage that would result from removing MFN outright would take place anyway.

Linking MFN to more general conditions would be far less damaging to business and may therefore appeal to many members of Congress as the best way to resolve the issue. In any case, debate will last through the summer, with a vote likely shortly before or after the August recess.

—DR

Mixed Signals for Tourism

China's tourism industry, devastated by last summer's violence, is struggling to rebuild—with mixed success. According to the National Tourism Administration (NTA), tourist arrivals in the first quarter of 1990 were down only 7 percent compared to the same period in 1989. Though the number may not be far off, the makeup of visitors has changed markedly. Arrivals from China's traditional "foreign" tourist markets—Japan, the United States, and Western Europe—are still down some 20 percent from 1989 levels. This decline, however, has been more than offset by spectacular increases in Asian visitors—particularly from South Korea and Taiwan. First-quarter 1990 Taiwan arrivals, for example, were up a whopping 40 percent over the first quarter of 1989, largely due to the growing number of Taiwanese businessmen exploring opportunities in South China.

The NTA, in the meantime, has taken advantage of the general lull to draw up a "rectification program" aimed at reasserting State control and eliminating travel agencies that undercut State-set prices. And in May, the NTA announced it was adopting a component pricing system, under which Chinese travel agencies will now individually price and sell each component of a tour, rather than quote one overall price as in the past. This move undoubtedly has the blessing of the China International Travel Service, which has borne the brunt of criticism from foreign tour operators for recent air and rail price hikes.

—PB

Sharon E. Ruwart
Retiring

Letter from the Editor

Pamela Baldinger
Succeeding

This is not only a time of transition for China trade, but for *The China Business Review* as well. I am retiring as editor-in-chief and will be succeeded by Associate Editor Pamela Baldinger, an expert and frequent author on China's tourism sector and other topics. New Associate Editor Vanessa Lide will be joined by Daniel P. Reardon, who has previously served as our circulation manager. Changes are also underfoot in *The CBR's* business staff, with Advertising Manager Bart Broome moving up to fill the newly created position of business manager and Felicia Bryant stepping in as circulation manager.

These changes capitalize on the staff's broad experience and promise continued improvements to the magazine, with timely articles, expanded Hong Kong coverage, and interviews with key China traders. Expect an even more useful *CBR*.

* * * *

This varied issue has something for everyone. Our cover focus features China's agricultural policy, illuminating recent developments in this key indicator of the leadership's economic priorities. The special report on China's environmental problems and policies describes how new regulations might impact foreign operations in China, and highlights potential sales opportunities. Traders and investors shouldn't miss the survey of Singapore's growing commercial links with China and importance as a regional base for China operations. This issue is also addressed in our interview with John Kamm, president of the American Chamber of Commerce in Hong Kong, who discussed with *The CBR* the future of American business there and Amcham's lobbying efforts on behalf of MFN. And finally, for those of you who love a mystery, *The CBR* takes an exclusive look at the secretive Panda Motors, a company with little experience but grand plans to break into China's automotive sector.

* * * *

It has been a pleasure and a privilege to work with you all, and I wish to express my thanks to the readers and contributors who have made *The CBR* a success during my two years at the helm. I look forward to keeping up with you as a devoted reader of future issues.

Best regards,

Sharon E. Ruwart

Short Takes

Taiwan's Olive Branch

Taiwan's President Lee Teng-hui announced in May that Taipei now recognizes the existence of the goverment in China and is prepared to participate in government-to-government talks. Although Beijing spurned the offer, stating that it will not deal with Taiwan on an equal basis because Taiwan is only a province, China's municipalities seem especially interested in courting Taiwan ties. Guangzhou recently announced it now offers preferential treatment for Taiwan investment, and CITIC plans to open a consulting service in Hong Kong to advise potential Taiwan investors.

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Reemphasizing Agriculture

Top leaders lack the vision and political will to implement new, effective policies

Lee Travers

For the past five years, the growth of Chinese agricultural output value averaged over three percent per year. Despite this growth, grain production—for China's leaders a key measure of agricultural success—stagnated, and China went from being a net grain exporter in 1986 to a net importer of over 10 million tonnes in 1989. Output of cotton, the benchmark industrial crop, fell by nearly 40 percent, and China, a major net exporter of cotton in 1986, became a modest net importer by 1989. Rapidly rising personal income in both rural and urban areas pushed up domestic demand for these key crops over this period, and though China was willing to meet domestic market needs at considerable cost in foreign exchange, the drop in domestic output between 1984-88 helped trigger central government concern over agricultural performance. Even before last June, pressure was building for a rethinking of agricultural development policy.

The problems faced by agriculture in 1988 can be traced in large part to complacency engendered by the success of the reforms begun a decade earlier.

Problems predate austerity

The problems faced by agriculture in 1988 can be traced in large part to complacency engendered by the success of reforms begun a decade earlier. Those reforms returned control of production to individual peasant households, raised purchase prices, and encouraged free markets. Responding to the new opportunities and incentives, peasants pushed up agricultural output value by 10.1 percent per year between 1979-85.

The government reacted to the spurt by diverting resources to other sectors of the economy. By the mid-1980s, official purchase-price increases slowed, and input prices, determined in an inefficient, corruption-prone hybrid of planned and market systems, began rising rapidly. Government expenditures on agriculture as a percentage of total expenditures decreased from 13.7 percent in 1979 to 8.1 percent in 1988. Over the same period, State capital construction funds invested in agriculture declined from 11.9 percent of total construction funds to just 2.9 percent.

Fearful of urban unrest, throughout the 1980s the government used subsidies to protect urban consumers from grain price increases. But by 1988, consumer subsidies were approaching East European proportions, and government deficits were growing at an alarming rate. Seeking relief from price pressures, the government sought ways to lower the cost of production, focusing on scale of production and distribution and prices of inputs. For example, beginning in December 1988, the government renewed its monopoly over fertilizer—the primary expense of most farmers—and other agricultural inputs such as pesticides and diesel oil, in an attempt to hold down input market prices. At the same time, the central government began reasserting its monopsony control over certain agricultural output markets, notably cotton, silk cocoons, and tobacco. The latter measure, largely unsuccessful, was aimed at guaranteeing supplies of low-priced inputs to State enterprises, which had been losing out to county and township enterprises offering higher prices to suppliers.

Post-Tiananmen shift in emphasis

Dissatisfied with the results of these policies, central leaders had begun to review agricultural policy well before the Tiananmen incident and the fall of Zhao Ziyang. The subsequent turn to more conservative economic views was reflected in proposals for a new agricultural policy announced following the Central Committee of the Chinese Communist Party's (CCP) 5th Plenum in November 1989. Appearances by CCP General Secretary Jiang Zemin and Premier Li Peng highlighted the importance of the meeting on comprehensive agricultural development, which also featured speeches by Vice Premier Tian Jiyun, State Councillor Chen Junsheng, and Minister of Agriculture He Kang.

In the keynote address, Tian Jiyun analyzed the causes of recent stagnation in grain and cotton output and outlined the government's proposed

Lee Travers has served as program officer for the Ford Foundation in Beijing since early 1988, working on rural programs. From 1980-82 he conducted research at the Chinese Academy of Social Sciences on rural enterprises and rural income. The opinions expressed in this article do not represent the views of the Ford Foundation.

policy response. The government's thesis is that China's grain production capacity now averages around 400 million metric tonnes, give or take about 10 million metric tonnes depending on the weather. According to Tian, since production capacity is determined by arable land base, manufactured input supplies, and agricultural technology, further purchase price increases would not directly relieve these constraints and therefore are not appropriate policy responses to output stagnation.

Tian also stressed that increasing Chinese dependence on world grain markets is politically unacceptable, and since agriculture is the basis for overall development, China needs a new breakthrough in agriculture to carry it through the decade. This breakthrough could be achieved by increasing output on fields currently providing low or medium yields. The yield increases are to come from increased investment, improved agricultural technologies, and better resource management. Further output gains are to occur by cropping land not now cultivated and increasing the number of harvests per year.

Passing the buck

The issue of increased agricultural investment highlights the central problem of the government's new agricultural policy: It calls for more funds than the central government is willing to spend. Government estimates of 1989 agricultural infrastructure investment show about ¥11 billion from peasants and collectives, and only ¥3.6 billion from government. These figures do not include the value of uncompensated peasant labor in various irrigation and reclamation schemes, which would make the proportion of peasant funding even higher. Though the government has trumpeted its March decision to increase 1990 agricultural infrastructure investment by ¥1 billion, most of that is earmarked for strengthening dikes and other flood prevention devices on major rivers—largely for the protection of urban areas—and will likely have little direct impact on agricultural production. Thus, despite the fanfare, the government is still counting on local rather than central resources to increase agricultural investment.

However, both peasants and local governments are squeezed for cash.

The issue of increased agricultural investment highlights the central problem of the new policy: It calls for more funds than the central government is willing to spend.

Inflation and the austerity program have caused virtual stagnation of peasant incomes over the past two years. Local government revenue depends heavily on township and village enterprises, which experienced substantial declines in growth rates in 1989. Although reduced off-farm employment may lead to increased agricultural labor, coming up with more cash for investment will be difficult under current conditions.

Even where agriculture offers competitive returns, peasants see investment in land or irrigation as risky, since the land tenure system offers little security (*see* p. 12). Central government support for small-scale, voluntary cooperatives appears to have heightened peasant insecurity by recalling the collectivization movement of the 1950s, which also began in a spirit of voluntarism.

There is therefore little likelihood of significant voluntary increases in peasant investment in land in the near term. Agricultural investment by local government or township and village enterprises will be severely circumscribed by the austerity program. Significant changes in rural investment patterns must await general economic resurgence, improved relative returns to agriculture, and perhaps most important, increased security of land tenure—none of which appears likely to emerge soon.

Transferring technology

The second major element of the new agricultural policy calls for faster and more effective transfer of agricultural technologies to farmers. In theory, the commune system effectively reduced the risk of experimenting with new seeds or other technologies, and provided a ready structure for the transmission of new ideas. A substitute agricultural extension system that can test new crops, techniques, and seed varieties, then teach the best of them to large numbers of peasant farmers, exists on government organization charts but functions erratically in practice.

Agricultural extension services are funded by local governments, and thus are best developed in comparatively wealthy, high-yield areas. The low-yield regions—on which the new agricultural strategy focuses—tend to have poorer county governments, with accordingly less well-funded extension programs serving less educated farmers. The problems facing the investment program are therefore compounded by those in the extension system.

Structural problems slowing the transfer of new technologies between research units and endusers are common throughout the Chinese economy, and experiments to improve the agricultural extension system have not had much success. Furthermore, the government's strategy for technology extension assumes that a large stock of applicable agricultural technologies sits unused in research units, though no evidence supports such an assumption. Indeed, the generation and testing of new technologies has been badly affected by the fall, in real terms, of agricultural research funding over the past decade.

Field Crop Output Value as a Percentage of Total Village Output Value

1978	52.6
1983	47.1
1984	43.4
1985	36.0
1986	33.0
1987	30.1
1988	26.2

SOURCES: State Statiscal Bureau, *Statistical Yearbook of China 1989, Chinese Rural Statistics Yearbook 1985*

Not only is the stock of fully-developed but unexploited technologies small, it will decrease further as basic agricultural research funding fails to keep pace with inflation—nowhere in recent policy pronouncements is there a recognition of the need to boost funding in this vital area. Further neglect bodes ill for the potential contribution of technological advances to increased agricultural output.

Improving management

Returns to direct investment in agriculture or indirect investment through research and extension systems ultimately depend on the quality of agricultural resource management. The rapid output gains of the 1979-88 period were achieved largely through improved exploitation of substantial—albeit badly managed—investment prior to 1978. Peasants have proven to be reasonably adroit managers throughout the past decade, consistently shifting resources toward higher return activities. That has meant allocating fewer inputs to highly regulated, low-return crops such as grain, and more to less-regulated crops, horticulture, animal husbandry, and fish farming. Within the broader rural economy it has meant a shift to non-farm enterprise and the sale of labor in urban areas. As a result, field crops such as grain and cotton dropped from 49 percent of total village output value in 1980 to only 26 percent in 1988, with most of the drop occurring after 1984, when increases in State purchase prices slowed.

Of course, the overall quality of management can continue to grow through improved education for both rural children and adults. Unfortunately, because education depends heavily on local funding, poorer, low-yield areas lag in providing good, cheap schooling even at elementary levels. Technical and adult education efforts are plagued by inadequate funding and inappropriate teaching methods. The recent histories of agricultural management and rural education do not suggest a ready solution to agricultural production problems. Rather, they indicate the importance of incentives and investment for developing a strategy for continued rural growth.

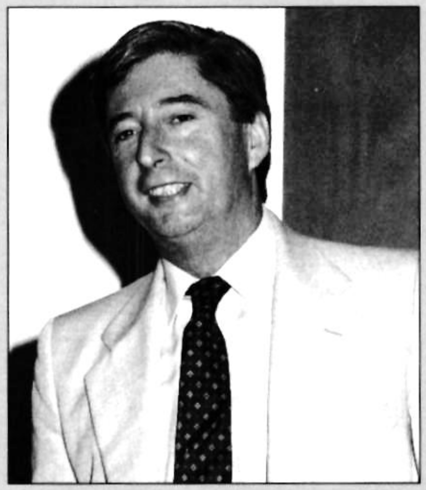
The other two elements of the new agricultural policy—more use of waste land and increases in the number of harvests per year (the cropping index)—are also unlikely to inspire much change in agricultural output. Though much new land has been brought under cultivation over the past decade, official figures show that the additions to cropped acreage have not offset land lost to urban growth. The cropping index has fallen since the 1970s, because output gains came at production costs far above the sales price of grain. Absent price increases or new technologies reducing production costs, peasants will not willingly increase the cropping index. There is thus little room for optimism about this source of potential output growth.

Reduced market distribution

Just as the State has reinstituted central control over inputs for key industrial enterprises, it has reinstated monopolies over distribution and prices of agricultural inputs, such as fertilizer, and certain outputs, such as cotton. Given China's

A Small Step Backwards

Ken Woolley is president of the Kentucky-based Pig Improvement Co., which operates a swine-breeding joint venture in Hubei Province. He spoke with CBR Intern Eliza Rosenbluth about current agricultural conditions in China.



CBR: *What are the major problems in China's agriculture sector today?*

Wooley: I think a lot of them are tied to the overall economic situation. Before economic reforms there was not really a market economy in China. Most of the major agricultural products—such as rice and cotton—were controlled tightly. Then, when China began opening up, farmers were encouraged to become more entrepreneurial. Some jumped on the bandwagon and began to produce the beginnings of a market economy, but in small ways. The market economy has regressed a little now, but it still functions.

Looking at agricultural production, the economics are distorted by the coexistence of free markets and a centrally-planned economy. The major segment of agriculture is controlled by the government. In pig production, many farmers buy feed inputs (corn) at below-market prices and sell their pigs at similarly low levels. In our own experience, the cost just to feed a pig—not including such costs as overhead, salaries, and transport and veterinary fees—has at times been more than the return per pig.

CBR: *Has there been a discernible difference in rural attitudes since last fall?*

Wooley: If there has it's been a backwards change. The peasants were beginning to get used to changes: moving forward, selling more freely, having more control over their work. They were beginning to benefit from working long hours for themselves. Now they have stepped back a bit, but not much. Our partners, who send frequent reports from China, say that things are getting better, that the economics are improving. We are now getting higher prices for our pigs and selling them more easily. I expect attitudes have improved along with these changes.

CBR: *In what ways could current agricultural production policies be changed for the better?*

Wooley: Things could be freed up. A more liberal market economy should be developed. The government should pursue the track it was following before June 4th. However, some bad things happened under those policies, too—corruption, unfairness. In the minds of some people in Beijing, corruption is a consequence of the free market system.

CBR: *Is there change in sight?*

Wooley: Not much—maybe tiny glimpses of change. If there is change it is likely to occur subtly and quietly. We do business all over the world—nowhere is it as difficult as in China.

offers competitive returns, peasants see investment in land or irrigation as risky, since the land tenure system offers little security.

economic efficiency. Motivation for strengthening the system of State control (under the rubric of a "comprehensive socialist service network" for agriculture) seems purely political: To prevent the penetration of capitalism into agricultural production. Inhibiting the role of market forces in the agricultural sector, however, will likely lead to stagnant production and increased rural discontent.

No change in sight

In the current economic climate, the "new" agricultural policy offers little prospect of stimulating the grain and cotton output gains sought by Beijing. While recent speeches indicate major problems in agriculture are clearly recognized by the leadership, creative new solutions have not been developed. In a time of austerity, the government's strategy depends on mobilizing scarce local government and private resources

Patrick L. Hanafee - Vice President, China Operations - General Motors Corporation

for investment in low-return agricultural enterprise. Beijing lacks sufficient power over local financial decisions to ensure compliance with this strategy.

Suggestions for financially cheaper—but perhaps politically risky—systemic changes have not been raised by the leadership. These could include actions to increase security of land tenure for peasants, make input prices more responsive to demand, and encourage greater specialization in production through larger, better-integrated output markets for all major agricultural commodities. The leadership needs new ideas to deal effectively with the problems created by the transformation of the agricultural economy over the past decade. Those ideas are not forthcoming in an atmosphere that discourages wide-ranging public debate over important issues of public policy—and that is one of China's greatest losses in the aftermath of Tiananmen. 完

China's top leaders have been encouraging peasants to devote more acreage to grain production.

Sources of Rural Instability

Peasants are fed up with corrupt officials and second-class citizenship

Frederick Crook

Before Tiananmen, China's leaders put rural problems on the back burner. Though the turmoil in the cities last spring had little direct effect on agricultural production, urban demonstrations jolted central leaders into looking at conditions of stability in rural areas. Farmers also articulated their discontent strongly enough that new Communist Party General Secretary Jiang Zemin, addressing a national conference on agriculture in December 1989, declared that rural instability was a major economic and political issue. The leadership has adopted a traditional response to the sources of peasant discontent: get in touch with the rural masses; strengthen rural political controls; and invest more resources in rural areas—but has indicated no willingness to change the 40-year policy of giving priority to urban development.

The chief grief: land

Of all the problems in rural China, those causing most concern among farmers stem from the land contract system. Problems with implementation, regulation, and corruption have turned the contract system—initially well-accepted—into an organizational quagmire.

From 1980-83 most economic cooperatives made contracts with farm families to cultivate specific plots of land for three to five years. Within certain constraints (stipulated by additional yearly contracts) families were left to decide which crops to grow, what techniques to use, and how to manage and allocate their resources. After fulfilling State procurement quotas, farmers were free to sell excess output in open markets or consume it themselves. Their primary economic objective soon shifted from completion of State output targets to profit maximization. The contract system improved efficiency and provided powerful incentives to farmers to raise output.

The farmers' continued lack of confidence in the State's willingness to protect a system fostering individual initiative can now be seen to have serious political, environmental, social, and economic consequences.

Farmers embraced the system because of the increased freedom it provided, but having seen enormous changes in the Party's rural policies over the past 40 years, they always feared policy reversals. For this reason, from 1980-84 farmers invested little to improve the productivity of their land. To encourage more investment, in 1985 Party leaders lengthened the contracting period to 15 years. However, recent statements by Party leaders encouraging farmers to return to collectivized production units have increased peasant alarm. The farmers' continued lack of confidence in the State's willingness to protect a system fostering individual initiative can now be seen to have serious political, environmental, social, and economic consequences.

Overzealous officials

In many localities, cadres made errors when dividing up the land and setting up the initial contracts—plots were too small, too scattered, not rationally distributed among farmers, and fees and rents were not properly set. Township governments, originally instructed by the Party to reduce the financial burden on rural citizens, use the land contract system to levy fees supporting everything from electricity for irrigation to social welfare benefits, cadre wages, and the families of People's Liberation Army soldiers. Rural citizens are also required to work a fixed number of days (5-10 days a year) on water conservation, school construction, and road projects. Farmers have been forced to pay fines and assessments which are used to purchase government bonds or to invest in village and township industries—in some cases funds are used to build office space for cadres and to entertain visiting officials. Excessive fines are also levied against peasant women bearing more than one child. In many cases, the rate of growth of such financial burdens has outpaced increases in per capita net income.

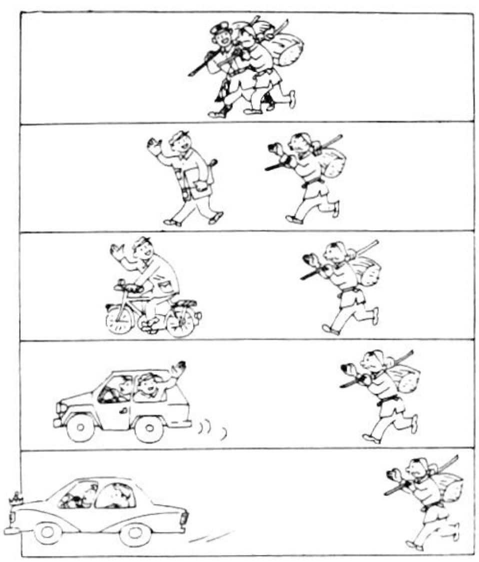
Although townships are supposed to prepare budgets each year and submit them for approval by township People's Congresses, the budgets are often not prepared or approved before rural residents have

Frederick W. Crook is an agricultural economist with the US Department of Agriculture. He is the author of six books on agricultural production in China, the most recent of which is Agricultural Statistics of the People's Republic of China, 1949-86, *published by the USDA Economic Research Service, 1988.*

to sign their annual contracts. Farmers therefore have little influence over township spending plans. Moreover, local governments have yet to install systems to adequately audit expenditures and determine if funds are used as intended.

Procurement woes

Farmers are also dissatisfied with the government's procurement system for agricultural products. Government purchase prices are usually lower than prices on the open market, and the cadres who operate the government purchase stations sometimes ride roughshod over farmers' interests. For example, when farmers have poor harvests and are pinched to fulfill their contract obligations, grain-station cadres often try to purchase as much as possible to meet urban requirements, leaving farmers—who usually try to keep one year's worth of grain supplies—short-handed. Conversely, when farmers reap a bumper crop—as in 1989—and requirements can be easily met, cadres refuse to purchase according to contract and insist on cheaper prices. Cadres also sometimes downgrade the quality of farmers' products to save on purchasing costs.



This cartoon of "Country Magistrate Li and Uncle Zhang," from an August 1989 edition of the *Beijing Review*, illustrates the increasing distance between Party cadres and peasants—both in terms of living standards and interpersonal relations.

With fixed procurement prices and rising input costs, farm profit margins have decreased. To partially counteract this phenomenon, the government established a program to guarantee inputs such as chemical fertilizers, diesel fuel, pesticides, and plastic sheeting at subsidized prices. However, corrupt cadres manipulated this system by transferring materials from the State fixed-price channel to the open market, pocketing the difference for substantial profits. Farmers who came to local supply and marketing cooperatives to buy subsidized quotas of fertilizer were told none was available, and were thus forced to buy supplies on the open market at higher prices. China's press has reported numerous incidents of irate farmers holding up truck convoys to prevent chemical fertilizer supplies from reaching corrupt cadres at supply and marketing centers. Authorities recentralized control over inputs and closed the open markets for input suppliers in 1989 to stop the profiteering.

Incendiary IOUs

IOUs were issued to farmers from 1986-89 because of credit shortages in rural areas. Most of China's capital resources are allocated to finance urban industrial growth, while lesser amounts are diverted to rural areas, where rates of return are lower. In the fall of 1988 government authorities sharply restricted credit throughout the economy to reduce the rate of inflation. This had a devastating effect on rural areas, since rural banks, not anticipating credit restrictions, had loaned out funds to rural industries instead of keeping reserves to fund agricultural procurement. Inefficiencies in the clearing of accounts between the Agricultural Bank of China and the Industrial and Commercial Bank of China, along with corrupt practices of bank and government purchase officials, also led to reduced credit availability. In fall 1988 and winter 1989, therefore, many farmers received IOUs for their crops.

In response, irate farmers demonstrated, harassed, injured, and even killed government purchase station cadres, and by the spring of 1989, threatened to boycott government purchase stations if IOUs were issued again. The increasing antagonism between Party and government officials and the peasants was reflected in a fall 1989 *People's Daily* article urging township governments to "insure the houses, livestock, trees, young crops, property, and personal safety of village cadres." Foreign experts have reported increasingly frequent incidents of peasant hostility toward cadres, including verbal abuse, spitting, and rock-throwing.

Despite a nationwide restriction of credit to restrain inflation in fall 1989, high government officials allocated large sums to purchase agricultural products. The IOU problem was therefore not as severe as in the fall of 1988, though some were issued in fall 1989 and early 1990, because government purchase stations did not have enough cash to buy all of the record 1989 grain harvest. Peasants were therefore left to store the grain themselves, which has led to disdain for government pressure to increase grain production, since the government can't afford to buy current levels of output.

Restricting rural industry

The rapid growth of rural industry from 1979-88 provided employment for farmers who were redundant in the agricultural sector. Often rural industries generated greater profit margins than crop cultivation, so these enterprises could afford to pay higher wages than farming offered. Because they provided employment and boosted family income the growth of rural enterprises was thus warmly supported by rural citizens.

China's leaders became concerned, however, when rural township and village enterprises began to compete with large, State-owned urban enterprises for markets and scarce raw materials such as capital, energy, building materials, cotton, and tobacco. To protect their political power-base—the urban proletariat—China's top leaders restricted the growth of rural industry. Beginning in fall 1988 and throughout 1989, officials used administrative means to close millions of "inefficient" rural enterprises, claiming they wasted scarce raw materials and used large quantities of energy resources.

What cadres could not accomplish by administrative means was accomplished by the drastic reduction of credit. Unlike State-owned enterprises, which can receive subsidies from the government to make up for losses, rural enterprises have no such safety valve, and are therefore more sensitive to credit availability and

Photo courtesy of Frederick Crook

A farmer in Heihe City, Heilongjiang Province, receives his ration of soybean oil.

interest rates. The contraction of rural enterprises restricted incomes for rural residents and threw millions of rural citizens out of work and back onto the land.

Growing awareness of inequality

In addition to dislike of the one-child policy, the other major source of peasant discontent stems from the realization—thanks in part to television commercials for goods peasants can't afford—that the standard of living in the countryside is lower than in the cities. Rural citizens are now more aware than ever before of the great gulf between them and urban dwellers.

Since the advent of reform, an increasing number of rural citizens have been able to visit major cities, either as tourists, representatives of their enterprises, or as guest construction workers. These travelers have seen for themselves differences in living standards between the cities and the countryside, and realized that despite the Party's exhortation that everyone must sacrifice to develop the country, the burden falls disproportionately on their shoulders. For example, government and Party policies guarantee higher income levels for urban dwellers, provide more social and welfare services to city residents, and prevent rural citizens from moving to urban areas. Except for housing, urban citizens are generally twice as well off as their rural cousins.

Getting in touch with the masses

In the first quarter of 1990, high-ranking officials visited townships, villages, and farm families to assess rural conditions. At the March 1990 Party plenum, leaders issued the "Decision of the CPC Central Committee on Strengthening Ties Between the Party and the People," directing lower-level officials to ensure that rural officials and citizens had the proper ideological outlook, to strengthen rural party committees and branches, to improve the func-

The Land Contract System

Family Guarantees

Crop	Sown area	Target		Investment in land[2]		Deliveries to upper administrative levels					Various economic targets to be sent up					
		Unit yield	Total output	Pond mud ferti-lizer	Crop stalks returned to fields	Total	State Procurement	Negotiated purchase	Collective reserves		1) Ag tax		2) Two funds in one fee			
									Fixed price	Negotiated price	Total amount	Average per mu	Sub-total	Per capita	Per labor force unit	Per mu
											3) Land productivity		4) Public deliveries			
											Land class	Amount	Based on labor	Based on land	Sub-total	Converted to yuan
											5) Labor deliveries[3]		6) Service fees			
											Number of persons	Total amount	Sub-total	Ag Ext. fee	Broadcast fee	Animal husbandry
											7) other fees		8) Grand total			
											Sub-total		Delivered			

1) Farmers guarantee to plant ___ mu of improved varieties of paddy rice.
2) Farmers guarantee to apply organic fertilizer from at least 2 pigs for the whole year, 1 brood sow, 3 sheep, 50 rabbits, 100 caged-layers, 200 broiler chickens, and plant 2 crops a year.
3) With regard to beginning and year-end targets for public deliveries, there should be a reconciliation of actual work done (___ percent) on basis of area (___ percent). Each work day will be converted to a yuan value at the rate of 1 day per ___ yuan.

Under China's land contract system, each year families agree to fulfill specific targets set by local authorities. This Jiangxi Province contract includes detailed fertilizer contributions, as well as several categories of unknown meaning (i.e., two funds in one fee). These categories may cover up to 166 different fees and assessments.

tioning of township governments and village committees, and to establish viable economic cooperatives. The leadership reasoned that if cadres and institutions at the township and village levels had functioned more efficiently, there would be far fewer rural grievances.

Party leaders are now in the midst of a campaign to strengthen Party committees in townships and Party branches in villages. This includes selecting leaders to implement Party policies, recruiting new members, and providing literacy and technical training. Central leaders are also interested in improving the governmental services of local townships and village committees, which are meant to provide forums in which residents can check abuses of power and thwart corrupt practices.

By strengthening government and economic cooperative institutions, the Party hopes to build a buffer between itself and the peasants. The cooperatives were designed to manage day-to-day, basic economic matters. In many villages, however, cooperatives either do not exist or are empty shells, allowing Party members and organizations to micromanage basic tasks. Peasant discontent with political, social, family planning, and economic practices and policies is thus registered directly with Party members. The Party wants to avoid being the new "landlord" in rural areas, preferring instead to set broad policies that local institutions implement. By so doing, the Party hopes to increase both its prestige in and control over rural areas. Peasant discontent is unlikely to dissipate quickly, however, because it will take considerable effort and time for the Party to train new rural leaders and establish efficient committees and cooperatives.

Little change in sight

Currently there seems to be little evidence that China's top leaders intend to change their tilt towards urban society. Their approach to urban and rural instability has been to tighten the stopper on the teapot; rather than find long-term, meaningful solutions to ease the pressure in rural areas, they have installed temporary measures.

Since most of the sources of rural discontent still exist, pressure for change will continue to build. China's 200 million urban residents are largely unaware of how their heavily subsidized lifestyles compare with those of rural dwellers, and would in any case be unlikely to give them up willingly. Given the regime's preoccupation with "stability," the leadership will probably not risk doing anything significant enough to alter the status quo. Peasant frustration will thus likely continue into the 1990s, constraining China's overall development and agricultural growth rates. 完

Photo courtesy of Frederick Crook

Township Guarantees

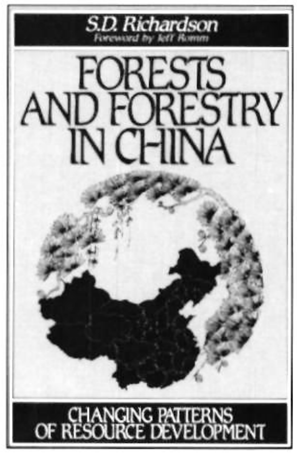
	Nitrogen fertilizer standard		Locally-produced amonium carbonate		Phosphate fertilizer		Diesel fuel		Cash advance		Production subsidy
	Standard percent	Amount	Standard percent	Amount	Standard percent	Amount	Standard percent	Amount	Standard percent	Amount	

The township in turn promises to supply farmers with necessary raw materials, as specified in this contract.

SOURCE: *CPE Agriculture Report*, May-June 1989 *Translated by Frederick Crook*

书刊介绍 Bookshelf

Forests and Forestry in China



S.D. Richardson. Washington, DC: Island Press, 1990. 352 pp. $45 hardcover, $26.95 softcover

S.D. Richardson, a leading forestry expert, was first invited by the Academica Sinica to tour China's forests in 1963. He was asked to make a return visit in 1986 to survey forests from Yunnan to Manchuria. This volume is based on his analysis of the changing state of China's forests, written from the unique perspective of having studied the forests and forest policy for over two decades.

One major contribution of this current volume is the compilation of comprehensive data on forests and the forestry industry, especially at the regional level. While the reader may perhaps be overwhelmed by details concerning each tree species commonly found in a particular forest or province, this information provides more than just interesting fodder for botany enthusiasts. Woven throughout the text are insights of particular value to those involved in the forestry industry.

One such section focuses on China's international timber trade, which is increasingly conducted through countertrade agreements. Ambitious targets in the late 1980s called for exports between $100-200 million, mainly to Europe, the United States, and the Middle East. While domestic hardwoods such as oak, walnut, ash, and elm were exported, softwoods such as pine and fir were imported, cut by Chinese sawmills, and re-exported. The appendices offer specific details on the types of timber available for export within each province.

The plymill industry in China also uses both Chinese and imported logs, producing reconstituted wood products such as fiberboard and particleboard for domestic and foreign use. Throughout China's wood processing industry, however, Robinson found great need for updated logging, transportation, and milling equipment to minimize waste. For example, he discovered that wood waste from sawmills is not routinely used by pulping facilities, which could use the wood chips in paper production.

Along with modernizing the physical facilities of the timber industry, the Chinese are striving to improve forest management techniques. Although Robertson notes there are problem areas—such as Chinese seeding and propagation practices—the Chinese forestry industry's commitment to modernization and receptiveness to foreign technologies and techniques bodes well for the future. —VL

A Guide to the Laws, Regulations and Policies of the People's Republic of China

James L. Kentworthy. Buffalo NY: William S. Hein & Co., 1989. 174 pp. $85 hardcover

This guide is no armchair reading, but for swivelchair lawyers and businesspeople as well as deskchair researchers, it's a valuable directory of hard-to-find documents on China's foreign economic laws, some 160 of which have been promulgated since the Joint Venture Law in 1979. Covering legislation on everything from trade unions in Guangdong Province to foreign currency bank accounts, this comprehensive volume meets a wide range of research and business needs, facilitating identification of specific laws—both in Chinese and English—and their subsequent amendments. Texts of the laws themselves, however, are not included.

The guide records multiple versions of certain laws—a very useful aid, considering the seminal 1979 Joint Venture Law exists in four translations, each containing a different number of provisions! Local provisions that enhance or supplement the often unclear laws issued from the central government are also included, and in many cases provide the only concrete legal details available. For example, the guide includes State Council regulations governing Special Economic Zones (SEZ), but also mentions more specific local SEZ laws of interest to foreigners, such as those governing taxation (both personal and corporate), employment, banking, and intellectual property protection.

Because the large body of China's foreign economic legislation has traditionally been inaccessible to foreigners—China itself maintains no reliable, officially published compendium of economic legislation—this book is an invaluable legal research guide. —DR

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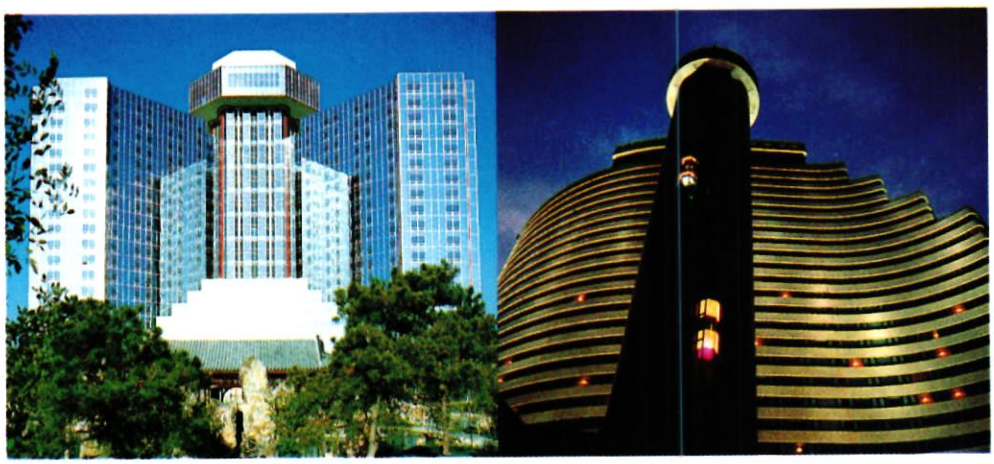

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"Reassessing US-China Ties":

The China Business Forum's Sterling Debut

The China Business Forum, the educational and research arm of the US-China Business Council, cohosted its first major conference at the Department of State in Washington, DC, on June 6. Cohosted by the Hong Kong-based Hotung Institute for International Affairs, the conference focused on "Reassessing US-China Ties: Economic Policy and the Role of Business" and was attended by some 300 representatives from business, government, Congress, academia, and the press. Corporate support for the conference came from Amoco Corp., ARCO International Oil and Gas Co., Dresser Industries, Inc., Monsanto Co., BellSouth International, The First National Bank of Chicago, and The Foxboro Co.

Host Eric Hotung, Council President Roger W. Sullivan, R. Derek Finlay of H. J. Heinz Co., and Hong Kong businessmen C. Y. Leung and Stephen K. C. Cheong share a joke after the morning session.

The framework for the day's discussion was set by co-sponsors Eric Hotung and Council President Roger Sullivan, who asked both speakers and audience to consider two basic questions: What is the relationship between foreign business and political, economic, and social developments in China? To what extent, if any, should commercial ties be used as a tool of foreign policy? Sullivan noted that much of Congress and the public hold a narrow view of business—a view reflected in the current debate over China's most favored nation (MFN) status.

Congressman William Frenzel addressed conference participants on Congress's attitude toward MFN renewal.

Sharing views

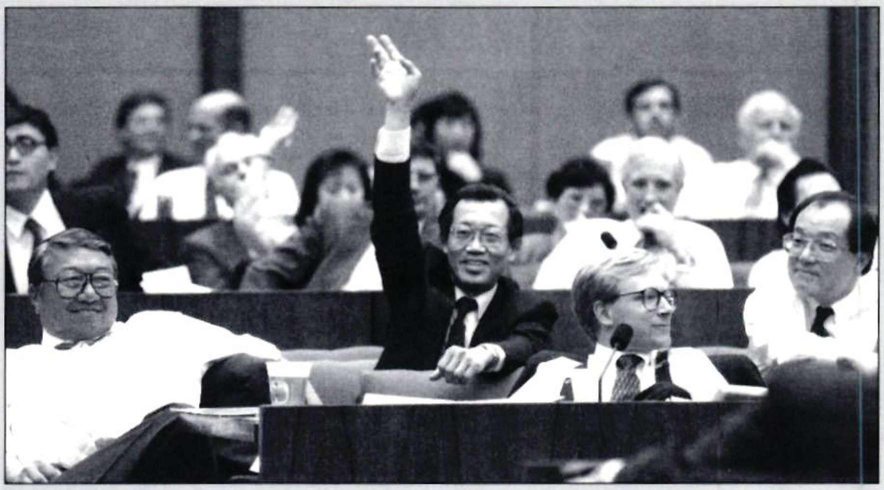
The morning session presented viewpoints from Congress, the administration, Hong Kong, and business. Representative Bill Frenzel (R-MN) discussed the status of MFN legislation in the Congress, urging supporters of MFN to convince Congress of the political and economic costs involved in denying its renewal. He advised conference attendees that meeting with Congressmen in their home districts is a more effective way to register opinion than meeting in Washington, DC, or simply sending letters.

Derek Finlay, senior vice president of H.J. Heinz Co., presented the businessperson's perspective of the role of commerce in US-China relations, pointing out the social and industrial contributions foreign companies have made in China. He noted that China will not develop without openness to innovation.

Two Hong Kong politicians and business leaders—Stephen K.C. Cheong of the Hong Kong Legislative Council and C.Y. Leung of the Hong Kong Basic Law Consultative Committee—illustrated the impact MFN withdrawal would have on Hong Kong. They pointed out that using trade as a weapon against the Chinese government would seriously affect the Hong Kong economy, damaging the 900 US companies there as well as the local population. Cheong and Leung also stressed that Hong Kong's entrepot role in China trade has enabled the colony to exert pressure for social change in China, but such pressure is dependent on strong economic links.

Kent Wiedemann, of the State Department's Office of China and Mongolia Affairs, finished the morning session with a review of the administration's China policy. He noted that although US-China relations are far from normal, the administration seeks to preserve relationships that benefit the US and Chinese people and therefore supports bilateral commercial links and the renewal of MFN. Wiedemann stated that although there are no plans to extend current China sanctions, they will not be lifted until dramatic improvements in human rights and renewed commitment to economic reform are displayed in China.

Mark Constantine of the House Banking Committee (*far right*) said there is little support in Congress for large-scale World Bank lending to China.



Panels and presentations attracted many questions from members of the audience, including Al Chu of AT&T.

Discussing the issues

Afternoon panels expanded on two of the most important issues in China policy today—renewal of MFN and the role of the World Bank. The MFN panel, chaired by Ezra Vogel of Harvard University, included Richard Bush of the House Foreign Affairs Committee, William B. Abnett of the Washington State China Relations Council, Peter Lo of the Hong Kong Goverment Economic and Trade Office, Zhang Ming of the Independent Federation of Chinese Students and Scholars, Huang Yasheng of the China Information Center, and Holly Burkhalter of Human Rights Watch. The discussion, fueled by audience questions, focused on whether removing MFN—or threatening to do so—could extract political leverage to influence China. The debate featured viewpoints from across the spectrum, thoroughly exploring the intricacies of the issue.

The World Bank panel, chaired by Michel Oksenberg of the University of Michigan and former National Security Council adviser, consisted of Dale M. Corson of Cornell University, Kim Woodard of A.T. Kearney Inc., John M. Niehuss of the Department of Treasury, and Mark Constantine of the House Banking Committee. They discussed the effects of the World Bank on China, which until Tiananmen received some $2-3 billion annually. Panelists and conference participants debated whether Bank programs should continue at a time when China's economic reforms seem to have stalled.

The Forum plans to publish conference proceedings this summer, and will continue to promote discussion on a range of US-China business topics with additional conferences in the future.

Peter Lo of the Hong Kong Government Economic and Trade Office and Holly Burkhalter of Human Rights Watch presented opposing views on MFN renewal.

Seventeenth Annual Meeting Discusses Reforms and Strategies

One full year after Tiananmen, the business outlook in China remains somewhat uncertain. In order to analyze the developments of the past 12 months and forecast the future business climate in China, Council staff, China experts, and over 120 member companies met for the Council's Seventeenth Annual Meeting in Washington, DC, June 6-7.

The meeting began with a banquet at which outgoing Chairman Charles E. Hugel of Asea Brown Boveri (formerly Combustion Engineering, Inc.) addressed the audience on the need for US business to look abroad for future growth and prosperity. The meeting then reconvened on June 7, with Council President Roger W. Sullivan outlining the Council's top priorities—campaigning for MFN renewal and keeping the lines of communication with China open. The rest of the day was devoted to discussing operational concerns of member companies and the state of reforms in China.

- ***Openness without reform***

Two China experts who recently returned from meetings with the Economic Research Council of China's State Planning Commission examined the state of China's political and economic reforms. Robert F. Dernberger, professor of economics at the University of Michigan, noted that there seems to be little consensus in China over what should be done to revitalize the economy, with planners waiting for major decisions to be made by the top leadership. In the meantime, minor adjustments are being made to domestic economic policy without regard to long-term planning. Dernberger stressed that Chinese leaders are not returning to 1950s-style central planning, but instead favor the early 1980s—shortly before problems with urban and price reforms arose—as the "golden age" of economic growth.

Harry Harding, senior fellow at the Brookings Institution, spoke on the outlook for political reforms. Many of the divisions within China's leadership existed well before Tiananmen, he argued, but were certainly worsened by last June's events. As a result, political education campaigns are now the largest since Mao's death, but serve more to repress dissent than bring the population to the government's side. According to Harding, political reforms are basically on hold, with the next few years likely to see a combination of repression, reform, and instability.

- ***Austerity's sting***

John Frisbie, director of the Council's office in Beijing, spoke on the practical impact of Tiananmen and the austerity campaign. He noted that with the exceptions of the power and aircraft industries, US sales to Beijing are down, as is foreign investment. However, no joint ventures have shut down operations in the past year, and few US representative offices in Beijing have closed. Instead, US firms have tended to reduce their China-based staff, resulting in a decline of perhaps 20 percent in the US business community in Beijing.

Frisbie said there has been little change in officials who deal with foreign trade, and the Beijing office's access to key people and information is still excellent. He cautioned US firms against expecting Chinese concessions in negotiations, warning that in many areas the Chinese have actually toughened their stance.

New Board Members

Paul W. Van Orden, executive vice president of the General Electric Co. was unanimously voted chairman of the Council's board of directors at the annual meeting on June 7. Nine new directors were also elected to the board: Ronald J. Anderson, president, Asia-Pacific Divisions, American International Underwriters; Theodore H. Black, president, chairman and CEO, Ingersoll-Rand Co.; John C. Hunter, III, vice president and general manager, Monsanto Co.; Frederick Malek, president, Northwest Airlines, Inc.; Patrick J. Martin, vice president and general manger, Xerox Corp.; Johnathan M. Schofield, president, United Technologies Corp.; Christopher Sinclair, president, Pepsi-Cola International; Don E. Six, vice president, Texaco International; James R. Spicola, president and CEO, Cargill Inc. A complete list of the Council's board members appears inside the back cover of *The CBR*.

Rick Pummell of Babcock & Wilcox and A. Salem of McDermott International listen raptly to annual meeting presentations.

Investment Program Manager Richard Brecher takes time out to meet with Kuang-Ming Lin and K. E. Humbert of the Dana Corp.

Legal Committee Elects New Officers

The Council's Legal Committee held its annual election of officers on June 7. Newly elected to the posts of chairman, vice chairman, and secretary/treasurer are Michael A. Kaufman of Johnson & Johnson International, Lucille A. Barale of Coudert Brothers, and Samuel X. Zhang of Graham & James, respectively.

The committee will next meet in September to address termination and liquidation of joint venture contracts. All Council member companies interested in investment topics are invited to attend.

- ***Coping with instability***

The afternoon program featured three tailored workshops designed to let member companies share information on problems involving sourcing, investment, and World Bank projects in China.

Panelists at the sourcing workshop discussed such common problems as poor quality and proliferation of Chinese trading companies. Panelists Pam Phipps of China Products Northwest, Inc., Ralph McIntyre of Mine Safety Appliances Co., Fred W. Pflum of Dresser Industries, Inc., and David P.C. Chang of David Chang and Associates noted that recentralization has not improved the situation.

The investment workshop focused on dealing with a more intrusive Chinese bureaucracy. Panelist Liu Chu of Gibson Dunn and Crutcher, a former MOFERT official, stressed that, potential investors should ensure that their projects fall within the State plan, or they will face difficulties in getting project approval and support. George Suter of Pfizer, Inc., William Yu of Johnson and Johnson, and A.J. Robinson of Portman Overseas then discussed how their projects have coped with the Chinese bureaucracy. They warned companies that trips abroad for Chinese equipment inspectors should be expected and budgeted for.

John Frisbie, director of the Council's Beijing office, spoke about the current business climate in China.

The multilateral projects panel addressed problems and successes of member companies in competing for World Bank-funded projects. Elizabeth Stewart of the Department of Treasury and Janice Mazur of the Department of Commerce, liaisons to the US executive director's office at the Bank, explained how they could help companies troubleshoot if unfair bidding practices are suspected. David Teng of Fluor Corp., Sue Jean Lee of Coopers and Lybrand, and Richard Pummell of Babcock and Wilcox shared a number of insights on their successful bids for World Bank contracts. The session concluded by cautioning US companies not to expect lucrative profits from World Bank contracts in China or elsewhere. However, such contracts can be useful in securing long-term Bank project work, and can help build credibility in China for future business projects.

Export Controls Working Group Examines COCOM Changes

The Council's Export Controls Working Group met on May 9 to discuss anticipated changes to COCOM's core control list for Eastern Europe. Bob Price, director of the Office of COCOM Affairs at the State Department, explained a US proposal that would delete 30 items from the core list, significantly liberalize 13 others, and completely decontrol 16 items to the China Green Line, effective July 1, 1990. The proposal was adopted by COCOM, thereby eliminating China's preferential treatment vis-a-vis Eastern Europe.

The group also discussed the fate of high-technology sales since the United States imposed sanctions against China last summer. Since June 1989, 493 licenses for goods on the munitions control list (MCL) have been slowed up or halted by the trade sanctions. Although sales of MCL equipment to China are still permitted if a waiver is obtained from the US government, Charles Duelfer, director of the Center for Defense Trade, remarked that continuing human rights violations in China make it impossible to guarantee that waivers would continue to be issued.

Pragmatic Partners

Stable trade and expanding investment link China and Singapore

Wu-Shan Lim

Despite lacking formal political relations with China, Singapore's commercial ties with its giant northern neighbor have flourished over four decades, proving strong enough to weather even the fallout of the Tiananmen incident last year. While leaders in Hong Kong, Taiwan, Japan, the United States, and other Western nations condemned the killings, and companies from these countries scaled back business in China, the Singapore business community proceeded with its China ventures essentially as usual. Although Prime Minister Lee Kuan Yew spoke out against the events of June 4, Singapore continued to demonstrate a deep-seated sense of pramatism. As a tiny city-state with a large Chinese population, Singapore finds China economically and politically too important to ignore.

Historic links

For over a century, China's trade with Southeast Asia has been conducted primarily through Singapore's ethnic Chinese community (*see The CBR*, May-June 1990, p. 24). In 1970, these ties were expanded with the formation of the Singapore Chinese Merchandise Importers and Exporters Association, a private organization of companies trading with China. The association continues to act as a channel to China for Singapore companies and keeps Chinese officials informed of problems facing Singapore traders.

Because neighboring Malaysia and Indonesia are staunchly anti-communist and suspicious of Chinese influence in the region, Singapore has kept its distance from China. But after China formally opened its doors to foreign business in 1979, a steady stream of both private and government interests from Singapore began to trickle into China, lured by the immense potential domestic market and the availability of cheap labor and raw materials, and supported by family ties with mainland Chinese. Business got a boost in 1981, when Singapore established a commercial representative office in Beijing to facilitate trade and investment. Prime Minister Lee Kuan Yew's visit to China in September 1985 encouraged the opening of other trade and investment channels between the two countries. After Lee's visit, relaxation of hitherto stringent Singapore government controls on its citizens' visits to China also eased the way for companies to explore new markets and sources.

China's Top 10 Trading Partners, 1988

Region/Country	Total Trade ($ billion)
Hongkong/Macau	29.6
Japan	18.9
USA	10.0
West Germany	4.9
USSR	3.2
Singapore	2.5
Canada	2.2
Italy	2.2
UK	1.5
France	1.5

SOURCE: China's Customs Statistics

Trade trends

Singapore-China trade has consistently favored China, with Singapore's deficit jumping from $215 million in the mid-1970s to $613 million in 1981, according to Chinese statistics. Total trade in 1988 amounted to $2.5 billion, of which Singapore's deficit came to $519 million (*see* chart). Singapore has traditionally supplied China with basic commodities and low value-added products such as crude rubber, animal and vegetable oils, spices, and textile yarns and threads. In recent years, however, exports to China have gradually expanded from primary commodities and raw materials to include manufactured goods such as electronic and industrial components, plastic resins, industrial machinery, telecommunications equipment, civil engineering equipment, chemical products, computers, and computer peripherals. Many of these items are produced or assembled by foreign companies in Singapore, including Hewlett Packard, Philips, Thomson, Sumitomo Corp., Foxboro, and 3M. China's major exports to Singapore have included textiles, fruits and nuts, medicinal products, base metal ores, animal feed, spices, and metal products.

Wu-Shan Lim is executive vice president of China-Deal Consultants Pte. Ltd., an investment advisory firm in Singapore. A former banker, he assists international companies in formulating strategic entry plans for China and in negotiating investment projects in China.

One major reason for Singapore's persistent trade deficit with China is that many of its imports from China are reexported to other Southeast Asian countries, especially Malaysia and Indonesia. As these countries have gradually established direct trade links with China, however, Singapore's role as a trade entrepot—and its China trade deficit—have correspondingly diminished.

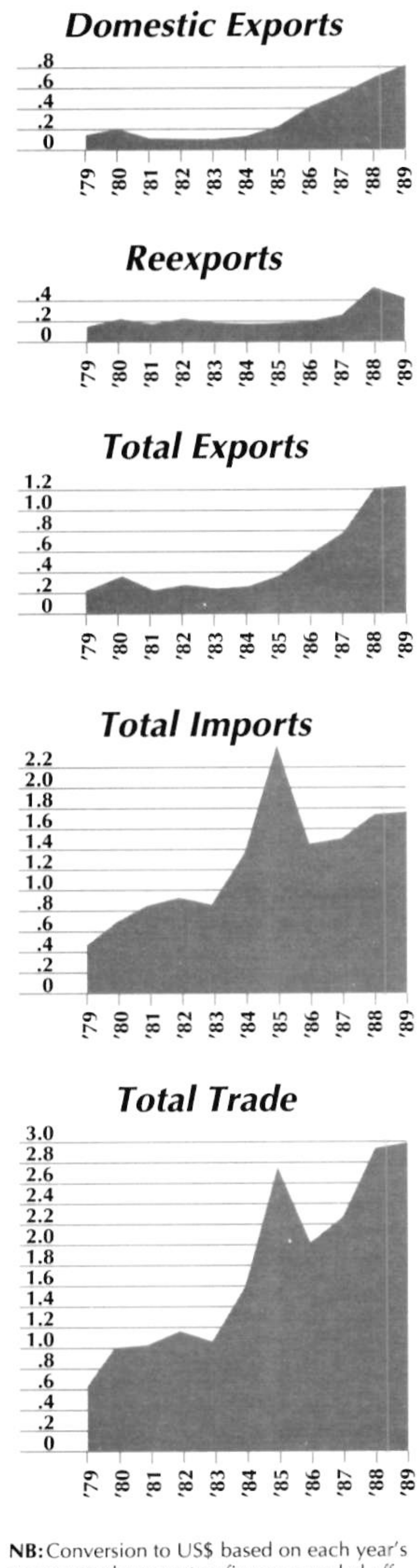
The petroleum trade boom

The second reason for the deficit is the addition of petroleum to the list of commodities traded. Petroleum products began to figure prominently in Singapore-China trade in the mid-1980s, when Singapore oil companies started winning contracts to process oil for which China lacked the refining capacity. In 1984, Shell Eastern Petroleum clinched the first crude oil processing contract with SINOCHEM to process 20,000 barrels per day of oil from the Daqing field, and Esso (Singapore) Pte. Ltd. subsequently made a similar arrangement with SINOCHEM. Likewise, Singapore Petrolem Co. (SPC) entered into a deal with SINOCHEM to process Daqing crude on a spot-contract basis. These three agreements accounted for a hefty $736 million worth of oil imports from China in 1984. The following year, oil imports reached an all-time high of $1.8 billion, accounting for 77 percent of total imports from China (*see* chart, p. 26). The 8.3 million tonnes of crude oil Singapore refined for China that year represented 15 percent of total Singapore refining. This was a timely development for Singapore, since its chief refining customers, Malaysia and Indonesia, were building refineries of their own.

By refining Chinese crude, Singapore was able to provide China with both refined petroleum and petroleum products such as lubricating oil and hydraulic oil for industrial use. In 1986, Singapore's oil exports to China soared 13 times over the previous year's total, to $166 million, in response to a surge in China's industrial demand. Owing to depressed oil prices and China's continued expansion of its domestic refining capacity, Singapore's petroleum trade with China is unlikely in the future to hit the freakish height of 1985, though it may continue to grow.

Singapore's Trade With China

($ billions)



NB: Conversion to US$ based on each year's average exchange rates; figures rounded off.

SOURCE: Singapore Trade Development Board

Encouraging investment

While Singapore-China trade, thanks in large part to petroleum processing, soared throughout the 1980s, investment did not become significant until after Lee's 1985 visit. Subsequently, many missions have been organized by the Singapore Trade Development Board to explore trade and investment possibilities.

Further encouragement was provided by two bilateral treaties. The 1985 Investment Protection Treaty provides a mechanism for settling investment disputes and protects against expropriation of China investments by companies registered in Singapore, whether local or foreign-owned. The 1986 Avoidance of Double Taxation Treaty ensures that income derived from businesses in China run by Singapore-registered companies will not be taxed twice after repatriation of profits to Singapore. This agreement also provides for dividends paid out of profits from a Singapore investment in China to be subjected to only 7 percent withholding tax by the Chinese government, instead of the usual 10 percent applied to all foreign investors.

A wide range of projects

According to Chinese statistics, in the period 1979-88 Singapore signed 239 contracts in China worth $530 million, ranking fourth behind Hong Kong/Macau, the United States, and Japan on the list of foreign investors in China (*see* table). About 70 percent of Singapore's total investment is concentrated in hotels and real estate, with the rest in manufacturing and service enterprises.

- **Hotels.** Since the $180 million Lido Holiday Inn Hotel was built in Beijing in 1984 by the Robin Loh Group, many Singapore companies have entered this industry. To date approximately 20 hotel and real estate projects involving Singapore investors are completed or under construction. Major investments include Singapore Land's $70 million Liangmahe hotel/office/shopping center project in Beijing, Lim Kah Ngam Ltd.'s 50 percent stake in the $60 million Shanghai International Club and Shanghai Hotel Equatorial, the United Industrial Corp. Ltd.'s 25 percent stake in the $23 million Tianjin Sheraton Hotel, L & M's Asia

Pacific Building, and International Hardware's Furama Hotel, both under construction in Beijing.

In Guangzhou, Singapore projects include the Guangzhou Cultural Holiday Inn, 50-percent owned by Lum Chang Building Contractors Pte. Ltd., and Lim Kah Ngam Ltd.'s Equatorial Hotel. In Xiamen, the Hong Leong property development group began construction in June 1989 of the Harbour View Hotel, in which it has a 70 percent stake. K.W. Lau, an entrepreneur, owns two smaller hotels, the Yangtze Hotel in Wuhan and the East Lake Hotel in Haikou.

Like other foreign hotel investors, Singapore companies are worried about the drop in tourism to China since June 1989, and some may have to refinance their hotel projects in order to repay bank loans.

• **Manufacturing**. Singapore manufacturing projects in China currently total over 100 with a contracted value of over \$170 million. They make products ranging from textiles and garments to computers and peripherals, plastic products, animal feed, and toothpaste, and are involved in processing minerals, milling flour, and farming oil palms, aquatic products, and poultry *(see* list). Most are targeted toward China's domestic market.

While Hong Kong is now—and will likely remain—the main commercial gateway for China trade, Singapore has the potential to play the role of chief investment gateway to China for the international business community.

• **Services**. With its common language bond—Mandarin Chinese is one of the official languages of Singapore—and well-trained workforce, Singapore is an important source of a variety of services for China. These include construction management, hotel management, infrastructure design, technology upgrading, management training, and financial services. Hyatt, Sheraton, and Holiday Inn, for example, all employ Singaporean managers in their China hotels. And a consortium of four Singapore companies—Hoe Huat Construction and Engineering, L. & M Prestressing, Low Keng Huat Construction, and Metrobilt—are building the \$60 million Jincang Mandarin Hotel in Shanghai. Indeco Engineers, a Singapore government-owned company, won a 1986 contract to supply and install electrical and mechanical facilities in Beijing's China World Trade Center, where over 100 Singaporeans work as managers, engineers, and technicians.

Sino-Singaporean Joint Ventures

To date, Singpore investments in manufacturing projects in China number over 100, with a total contract value of over \$170 million. The following list is a representative sampling of Sino-Singaporean joint ventures. It is not intended to be a complete list of projects and details have not been independently verified by The CBR. *Singapore companies appear in boldface.*

FOOD PROCESSING

Intraco and Tropical Produce and Guthrie of Malaysia have together taken a 49 percent stake in a \$30 million plantation to grow oil palms in Hainan Province in partnership with China's Overseas Chinese Enterprise Corp.

Khong Guan Group operates a joint venture in Shekou SEZ manufacturing biscuits for sale in China. Khong Guang also has a 30 percent stake in the \$1.3 million Henan Khong Guan Cereal & Oil Food Products Co., Ltd. in partnership with the Oil & Cereal Industry Corp. of Nanyang Prefecture, Henan Province. Production is scheduled to begin later this year.

Prima Ltd. has 20 percent stakes in two Shandong joint ventures, the Xinyan Foods Co., Ltd., a grain-milling factory, and Yantai Feeds Ltd., which produces animal feed products. Both ventures sell output in China and overseas. Prima is also an equity partner, along with the Qingdao Jiaonan Xi'an Food & Oil Processing Co., in the \$4.9 million Xinghua Cereal Oil & Food Products Ltd. flour-processing joint venture in Qingdao.

Cold Storage has a 50 percent interest in the \$2 million Hua Xin Beverage Co., Ltd. in Shandong, which bottles Laoshan's famous mineral water for sale both in China and overseas.

Inno-Pacific Holdings and the city of Tianjin signed a contract in September 1988 to develop a \$26 million chicken-breeding project.

Fushanyuan Co. Ltd. and Shandong Qifu Distillery in early 1989 signed a \$4.3 million contract to produce liquor. Fushanyuan holds a 25 percent stake in the project.

QAF, the Tianjin Tanggu Transport & Warehousing Co., and the Tianjin Industrial and Economic Development Co. established in 1989 the \$2 million Tianjin QAF Foodstuffs Co., Ltd. to manufacture, process, and trade spices and foodstuffs.

LIGHT INDUSTRY

Safety Glass Manufacturing Pte. Ltd., CITIC, and the Hangzhou General Glass Factory established in 1989 the Hangzhou Safety Glass Co., Ltd. joint venture to manufacture windscreen glass for Shanghai Volkswagen Co. Ltd.

Yongli Enterprises Private Co., Ltd. and the Heilongjiang Provincial Yingchun Forestry Bureau established in 1989 the \$1.3 million, 10-year Huaxin Timber Co. joint venture to process timber for furniture production.

Will Lord Trading Pte. Ltd. and the Heilongjiang Provincial Suiyang Forestry Bureau established in 1989 the 13-year, \$3.4 million joint venture Heilongjiang Xinyang Timber Co.

Top 10 Foreign Investors in China, 1979–88

	Number of projects	Total value ($ million)	Percent of total foreign investment in China
Hongkong/Macau	13,421	17,874	70.8
USA	647	2,398	8.5
Japan	647	1,313	4.7
Singapore	239	530	1.9
West Germany	55	333	1.1
Spain	2	191	0.7
Canada	55	162	0.6
UK	54	160	0.6
Holland	14	156	0.6
France	50	147	0.5

SOURCE: MOFERT

• **Banking.** Singapore's Oversea-Chinese Banking Corp. (OCBC) has continuously maintained branches in Shanghai and Xiamen since 1949. Since then it has been joined by the United Overseas Bank, with a branch in Xiamen and representative offices in Beijing and Guangzhou. The Overseas Union Bank also maintains two representative offices and is aiming to establish a branch in Shanghai. DBS Bank is currently setting up a joint venture bank in Xiamen. In addition to the onerous regulations hampering all foreign banks in China, the smaller size of Singaporean banks compared with their Japanese and European counterparts makes it unlikely that they will become major players in China's financial markets.

Today, most international banks lending to China projects work through Hong Kong branches. However, banks will be more wary of booking loans through Hong Kong which extend beyond the 1997 transfer of sovereignty, since these loans would fall under Chinese jurisdiction. Banks in Singapore may thus be well positioned to become the booking center for future loans to China projects.

• **Tourism.** In 1986, China and Singapore signed an agreement on mutual cooperation in the fields of tourism, civil aviation, and exhibitions, marking a major step forward in the economic ties between the two countries. The agreement provided a concrete foundation for future cooperation, such as joint marketing of China and Singapore as

Ltd. to process timber into construction materials.

Wearnes Technology and the Shenzhen Science and Industry Park have a $3.5 million plant in Shenzhen SEZ that makes floppy disk drives primarily for sale in China. Wearnes has also worked with the Beijing Microelectronic Corp. to develop and improve an electro-stimulator (the Likon) that works on the principle of acupuncture, using electronic pulses rather than needles. The Singapore Economic Development Board supported the project under its Product Development Assistance Scheme. Sales of the Likon, which is marketed to countries in Europe and Asia, reached $1 million in 1989.

Mido Textiles, in partnership with the Beijing Shu Yi Agriculture, Industrial & Commercial Co. and Beijing Textile Products Import/Export Co., operates a $2 million factory in Beijing that makes Western-style men's suits for the domestic market.

TRADING SERVICES

Trade Development Board Holdings and China National Commodity Inspection Corp. established in 1989 the Inspection Services International Pte. Ltd. joint venture to provide commodity inspection and survey services.

Tai Heng Hong and Beijing Arts & Crafts Import/Export Corp. established in 1989 the $500,000 Jing Ta Trading joint venture to trade arts and crafts, light industrial products, and traditional Chinese medicine.

Intraco Trading Firm and CHINAPACK established in 1989 the $2.6 million Sintrapack Pte. Ltd. joint venture to trade packaging materials.

TRANSPORTATION

Neptune Orient Lines and SINOTRANS established in January 1990 the International Transportation & Cargo Services Ltd. joint venture to provide trucking services between Fujian and Guangdong provinces. Neptune also established with SINOCHEM the Orient Stella Shipping Pte. Ltd. joint venture in 1988 to expand tanker chartering operations.

Singapore Aerospace Pte. Ltd., Aerospatiale Co. of France, and China's CATIC signed an agreement in February 1990 to manufacture parts in China to use in assembling model P-20 light-duty helicopters in France.

Pacific International Lines Ltd., the American company Ackon International Corp., and the Shanghai Jin Jiang Shipping Corp. established in 1990 the $9 million Shanghai International Container Co. joint venture to produce 16,000 containers per year.

CONSTRUCTION

Innovation Publishing House and New Technology Development Co. in Shanxi Province agreed in 1989 to establish the Huaxin Enterprise Co. Ltd. joint venture to provide building materials.

National Iron and Steel Mill and China State Construction and Engineering Corp. established in 1989 a $255,000 joint venture to explore markets for building materials, machinery, and construction projects.

Jurong Cement, Reliance Agency Holdings of Hong Kong, and the Jainan Sihuan House Landed Property Development Corp. agreed in 1989 to establish an $8 million cement production venture in Hainan.

N. F. Lian is regional sales manager at Foxboro Far East Pte Ltd., an engineering services company located in Singapore. He spoke with Editor Pamela Baldinger about using Singapore as a base for China operations.

CBR: *When did Foxboro first establish a Singapore office?*

Lian: Our Singapore office was established in 1977. It served as Foxboro's frontline sales and service organ for China until the Shanghai Foxboro joint venture started operations in 1983. Since then the Singapore office has been responsible for providing sales, engineering, and service support to Shanghai Foxboro.

CBR: *What advantages does Singapore have over Hong Kong as a base for China operations?*

Lian: In our line of business (process control), we need viable processing industries and complementary suppliers of goods and technical services. These are not available in Hong Kong. In addition, an operation in Hong Kong would depend heavily on the China market; in Singapore, we can tap the Southeast Asian market as well.

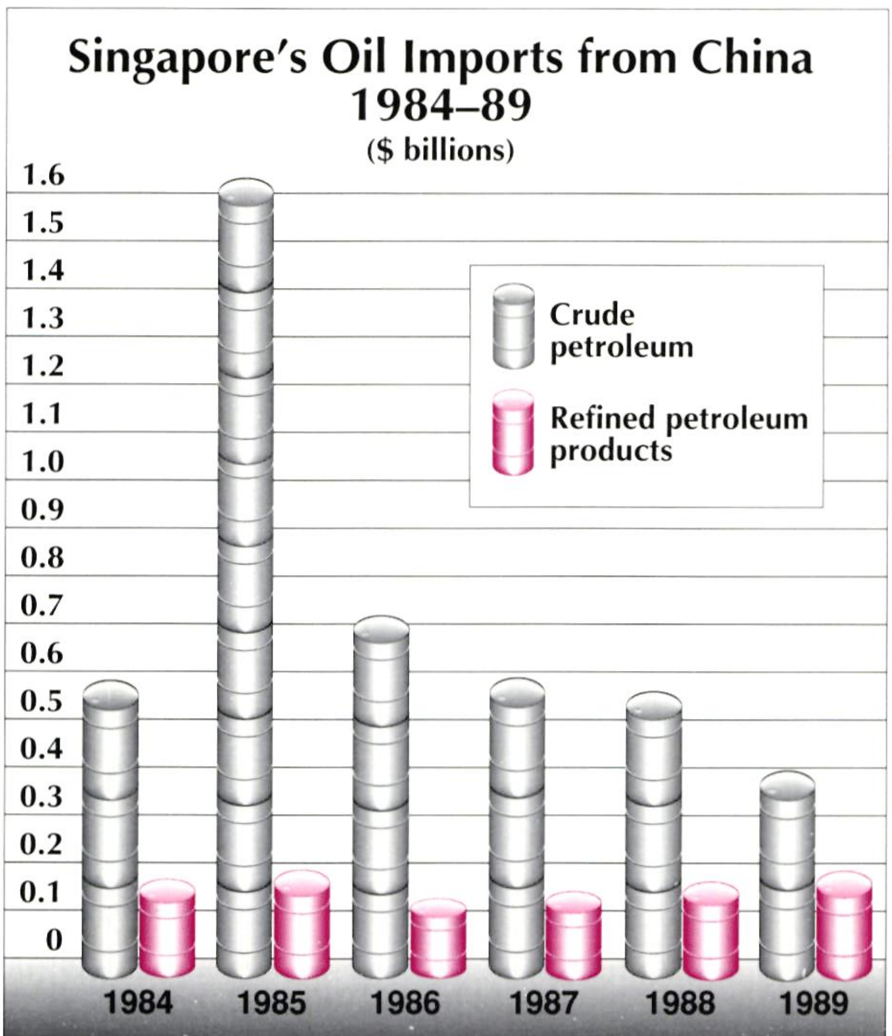
CBR: *Does Foxboro source financing for any of its China projects from Singaporean banks?*

Lian: No, we have not made use of Singapore financing to help expand our business opportunities, but we hope to be able to in the future.

CBR: *How do you foresee Singapore's position as an investment gateway to China developing in the years to come?*

Lian: More European and American multinationals will probably choose Singapore as an operations headquarters to support their China business, and China will also likely expand operations in Singapore to tap the international market. However, it is difficult to imagine major industrial investment being channeled through Singapore because it lacks process-plant engineering and plant-equipment manufacturing capabilities.

tourist destinations; exchange of information on managing hotels; travel agencies, and tour guides; and cooperation on personnel training and airport management. In 1987, the China Travel Service (CTS) set up a subsidiary company in Singapore called Singa CTS.



SOURCE: Singapore Trade Development Board

Reactions to Tiananmen

Like other foreign investors, many Singaporeans adopted a wait-and-see approach to new or expanded investments in China after the Tiananmen incident, but did not go so far as to pull out. For example, Inno-Pacific Holdings, which operates the Kentucky Fried Chicken franchise in Singapore, put on hold a $100 million project to establish 10 poultry farms in China, though negotiations are underway. On the other hand, Lam Soon (Hong Kong), a company controlled by Singapore's Whang family, has pressed ahead with plans to invest $60 million in oil and flour milling projects in Guangdong in the next two years. Like other companies, Lam Soon now finds the Chinese to be more cooperative in the hope of preserving relations with foreign investors. Other Singapore companies, such as the partially government-owned Sembawang Shipyard and Straits Steamship, continue to look for new investment opportunities in China.

An investment gateway

Like Hong Kong, Singapore's Chinese community—76 percent of a population of 2.6 million—has language, cultural, and family ties to China, a sophisticated workforce, substantial capital resources, and a well-developed infrastructure. While Hong Kong is now—and will likely remain—the main commercial gateway for China trade, Singapore has the potential to play the role of chief

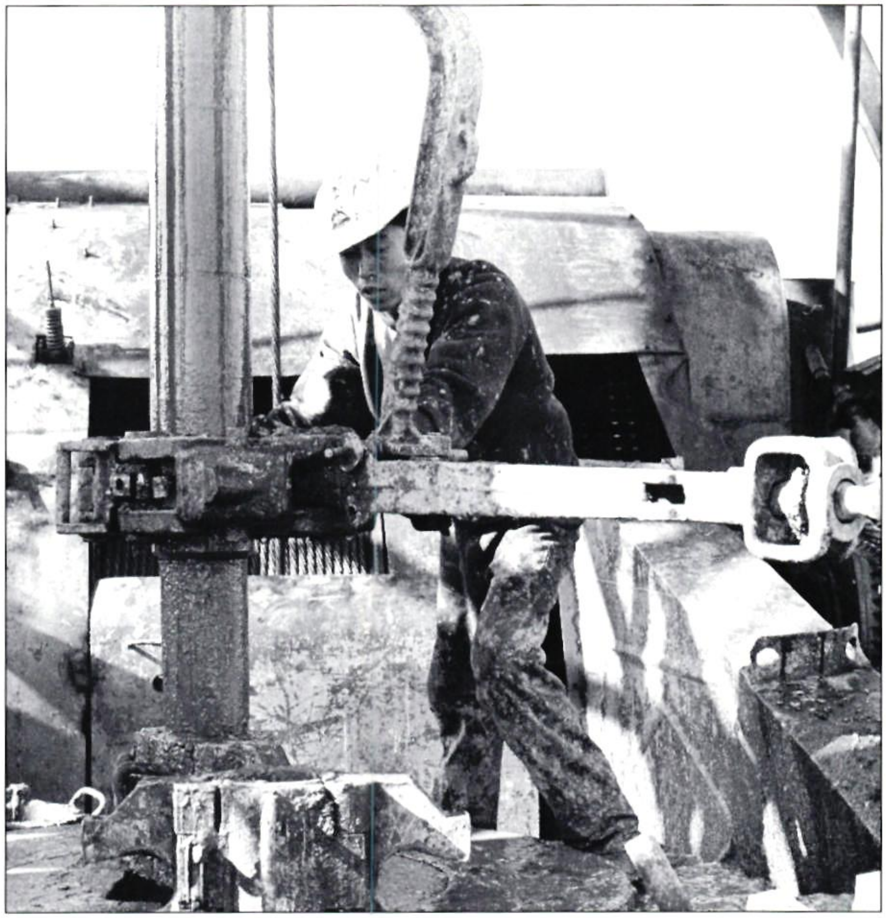
After China formally opened its doors to foreign business in 1979, a steady stream of both private and government interests from Singapore began to trickle into China, lured by the immense potential domestic market and the availability of cheap labor and raw materials.

investment gateway to China for the international business community.

The Singapore government's efforts to promote the country as an investment gateway include such incentives as a reduced income tax on corporate profits (10 percent compared to 32 percent) for companies setting up regional headquarters in Singapore. To date more than 20 multinationals have done so, including Brown & Root, Data General, Molex, Foxboro, Philips, Union Carbide, Sony, Deutsche Bank, Polysar, Matsushita, Fujikura, Omron, and Chloride Eastern. Many of these companies direct their China business from their Singapore offices (*see* p. 26).

Steady future prospects

No major obstacles stand in the way of expanded Sino-Singaporean commercial ties, and trade should continue to grow, since Singapore needs raw materials and a source of cheap products and offshore manufacturing, and China needs manufactured products, machinery, advanced technical expertise, and management skills. Singapore is expected to follow Indonesia in establishing formal diplomatic ties with China in the near future, though this in itself is not expected to have a dramatic impact on trade. As a sovereign state with a supply of trained workers and investment capital reserves, Singapore is in a good position to offer strategic alliances to international companies seeking a base to launch and manage investment projects in China. 完



Chinese crude oil is often processed in Singapore and then re-exported to China.

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The Perils of Pollution

China is awakening to a wide range of environmental problems

Vanessa Lide

No one who has ever breathed Beijing's air in the winter or walked past Shanghai's rivers in the summer can fail to recognize the gravity of China's pollution problems. Rapid growth of energy-intensive industries since 1949 has had severe effects on land already strained by the need to provide food, fuel, and shelter for a large population. Although pollution problems are widely acknowledged, environmental protection has taken a back seat to other priorities, particularly under the austerity program. Environmental awareness in China is clearly on the rise, however, though new protective administrative and legal measures will require stronger enforcement to have much impact.

Workers in Luda City, Liaoning Province, remove city refuse to the suburbs for use as fertilizer.

Water woes

In 1984, Li Peng, then director of the State Council Environmental Protection Commission, stressed that effective management of China's "three wastes"—water pollution, air pollution, and garbage—was the country's top environmental priority. By 1989, however, these problems had worsened. China's water supply, in particular, poses perhaps the biggest environmental and health challenge. Tapwater is unsafe to drink nearly everywhere, so people rely on ever-present thermoses of boiled water. Urban areas lack adequate sewage treatment facilities and release untreated wastes into streams and rivers. In Shanghai, for example, less than 5 percent of wastewater undergoes even primary treatment using screening and sedimentation techniques. Treatment using chemical or biological processes to break down water-borne bacteria is virtually non-existent. Untreated waste dumped into surrounding rivers has been linked to serious health problems in Shanghai, such as last year's outbreak of hepatitis, which was caused by eating contaminated shellfish.

Both urban and rural areas are also at high risk from polluted effluent from industrial sites. The promotion of small- and medium-sized industries, particularly in rural areas, has created new jobs and raised living standards throughout China, but rapid growth of these factories has taken a heavy toll on the environment. Monitoring and enforcement of wastewater pollutant levels is often accorded low priority because of the emphasis on increasing production. Water supplies in cities, and, increasingly, in the countryside, are threatened by high concentrations of hazardous wastes such as oil, cyanide, arsenic, heavy metals, chlorinated hydrocarbons, nitrates, and sulfates.

Before becoming an associate editor of The China Business Review in March, Vanessa Lide was with the International Institute for Energy Conservation, where she worked on programs to introduce energy-efficient technologies to China and other developing countries.

Poisoned drinking supplies

Water pollution poses an alarming threat to underground water supplies that have provided drinking water for centuries—once polluted,

Assessing China's Environment

Dr. Nay Htun, regional director for Asia and the Pacific for the United Nations Environment Programme (UNEP), has worked with China's leaders on environmental issues for 15 years. In recognition of his contributions, in 1987 he was conferred the title of honorary professor at Tongji University in Shanghai. He recently spoke with Associate Editor Vanessa Lide about China's environmental problems and successes.

CBR: *How does the state of China's environment compare with other developing countries?*

Htun: China faces a number of serious environmental problems—more so than other countries, perhaps, because of the great demands of the population upon the land. On the positive side, my continued impression after numerous visits is that great efforts at the national, provincial, and local levels are being made to promote environmental awareness and action. There is currently a great effort to educate the public through the media and training in schools, universities, and the workplace. Also, environmental impact assessments are now used widely.

China, in fact, is better off environmentally than many developing countries because it has a well-defined structure to lessen pollution—besides the National Environmental Protection Agency (NEPA), there is an environmental bureau in nearly every province now. Also, a strong point in China's favor is the high premium on training and education.

CBR: *What are China's most serious environmental problems?*

Htun: Air pollution is a major concern, caused in large part by heavy use of coal, which provides some 70 percent of China's energy. The state of China's water supply—both quality and quantity—is also a serious matter. Soil erosion, desertification, and deforestation are also of great concern in China, which has limited acreage of arable land.

CBR: *Is China making progress in these areas?*

Htun: Great efforts have been made on all fronts, although great challenges lie ahead. Spending on environmental measures in China is increasing at the national and regional bureau levels, and there is every indication that this will continue. For 1988, total expenditures on environmental programs was ¥7 billion, or approximately 0.7 percent of GNP. The government is encouraging industries to be more energy-efficient, which will help decrease coal-based emissions. Households, however, still primarily use coal for heating and cooking, although there has been some progress in conversion to liquefied petroleum gas (LPG).

For toxic chemicals, another serious problem affecting the water supply, China is no different from any other country—there are few good statistics on the quantities and the specific compounds released into the water supply. By all indications, however, the government is very aware of the toxic waste problem.

CBR: *What role can foreign companies play in improving China's environment?*

Htun: Foreign companies can provide China much-needed expertise and technology, particularly environmental engineering firms. Though China possesses significant technical expertise in many areas, there has been little exposure to some of the "clean" and recycling technologies developed in the West to protect the environment.

In the factory, a priority is for foreign companies to encourage on-the-job training in proper environmental management.

CBR: *How might China's environment develop over the next 20 years?*

Htun: China, like all countries, must face up to global problems of energy and environment as they relate to the emission of greenhouse gases and acid precipitation. Because China is so heavily coal-dependent, it will continue to be a major emitter of carbon dioxide (CO_2)—China, the United States, and the USSR together account for over 50 percent of global CO_2 discharge. But while the other two have alternatives to coal use, China's options are more limited. Growing domestic and international concern over China's greenhouse emissions will place a high premium on technology exchange to foster greater energy efficiency and abatement of these emissions.

CBR: *What is* UNEP *doing in China?*

Htun: UNEP plays a catalytic role in China, providing information and involving as many Chinese scientists and administrators as possible in technical workshops on the environment. In Shaoxing, Zhejiang Province, UNEP in 1986 helped organize an international group of experts to clean up the scenic canals—$10 million was pledged from the Chinese side, and several European governments also contributed funding. In Lanzhou, Gansu Province, UNEP and the Lanzhou Institute for Desert Research have initiated an international training and research center—researchers from other countries are now coming to China for assistance in controlling desertification.

these aquifers are virtually impossible to clean. In Beijing, underground drinking water supplies are contaminated by pollutants released by the city's factories. Other cities in the northeast, where water supplies are already scarce, have also begun to show high levels of poisonous wastes in the groundwater. Even Guilin, renowned for the beautiful Li River that winds past striking scenery, is not immune—despite much public outcry over industrial wastes being dumped into the river in the late 1970s, cyanide, phenol, and mercury concentrations in the river have continued to rise, and a rubber plant is reportedly dumping waste directly into the famed scenic grottoes.

Rural areas are not only susceptible to pollution from industrial sources, but also from agricultural runoff tainted with chemical fertilizers and toxic pesticides. In 1988, riots broke out in a farming community south of Beijing when officials, fearful that a nearby dam would break, decided to release water from a local reservoir that had been contaminated by industrial waste. The entire crop was destroyed, and health problems such as rashes were reported among families living in the area. In Liaoning Province, 1,000 drinking water wells were recently closed because of high concentrations of toxic chromium and cadmium. Increased use of chemical fertilizers and pesticides—China is now the world's leading producer of chemical fertilizer—has brought additional problems. Improper use of pesticides in particular can cause high concentrations of harmful chemicals in the water supply, leaving the local population at risk of outright poisoning as well as long-term health problems.

Coal-choked air

Air pollution is also a growing concern in China, where current levels of air pollution are similar to those found in developed countries in the 1960s. Worldwide attention to transborder pollution issues, especially global warming, inevitably focuses on China as a major coal-producing nation, since coal combustion is a leading source of greenhouse gas emissions. Within China, concern also exists about the adverse impacts of air pollution on health and agriculture. Beijing, Xi'an, and Shenyang are among the world's top 10 worst sites for concentrations of sulfur dioxide (SO_2), a by-product of coal combustion from industrial and electricity-generating facilities. High SO_2 levels are not only a health hazard, but also contribute to growing acid deposition levels, causing lower crop yields and losses to forests. By some estimates, China's acid rain problem results in farm losses of ¥1 billion per year, and is thought to be more serious than acid rain in the northeastern United States and Scandinavia.

Another cause of serious health problems is high levels of suspended particulate matter, which range from fine aerosols to larger dust particles. In China, particulates derive primarily from fly ash from industrial and

A Little Luck—and a Lot of Persistence

A number of US companies involved in the production of environmental monitoring and pollution-control equipment have successfully pursued business opportunities in China, with both short- and long-term strategies. Though many of these companies entered China with high expectations, most have found recent sales hampered by China's lack of cash. As one China executive summed up his company's experience, "The need is there, the desire is there, but sales are proceeding at a snail's pace."

Some companies active in the environmental field have capitalized on opportunities in China on a random basis. Fabric Filters NW, a manufacturer of collector systems for airborne pollutants, had never considered China a potential customer. In 1987, however, they were asked to supply filter bags and collector systems for an aluminum foundry in Lanzhou. The Lanzhou enterprise had purchased equipment from Kaiser Aluminum, which was already using Fabric Filters' pollution-control technology. Fabric Filters provided the Lanzhou foundry with nine collector modules and technical assistance, but has made no other sales in China.

Other US companies have invested great time and resources into developing markets in China for their products. Joy Environmental Equipment Co., for example, signed a technology transfer agreement with the Harbin Environmental Equipment Co. to manufacture and market their technologies in China, including electrostatic precipitators, baghouse systems, and flue-gas desulphurizers (scrubbers). So far, two 600-megawatt precipitators have been manufactured for a Harbin power plant, and baghouse equipment has been manufactured for export to China-assisted power plants in Pakistan. No scrubbers have yet been built.

According to Yang-Jen Chen, Joy's vice president for Pacific Basin operations, China's severe energy shortages will lead to the construction of hundreds of new coal-fired power plants in the next few years, which could drastically increase emissions of sulfur dioxide (SO_2) and carbon dioxide (CO_2), among other pollutants. The increase in new power plants and industrial facilities will probably lead to rapid growth in the market for pollution-control equipment. Yet US companies may have trouble penetrating these markets, says Chen, because "Unlike Japanese trading companies, which will look at countertrade opportunities, US firms are less likely to consider alternate financing options." These options may prove key to tapping China's growing market for pollution-control equipment.

One US company that has successfully penetrated this market is Thermo Environmental Instruments, Inc., which has been selling air pollution monitoring systems in China for the past decade. In Beijing, Thermo provided nine monitoring stations linked to a central computer system to measure ambient air levels of SO_2, CO_2, nitrogen oxides (NOx), and ozone. A similar air monitoring system was developed for the city of Lanzhou, along with equipment to measure stack emissions in the steel industry in Anshan.

From 1980-88, Thermo's sales of environmental monitoring equipment amounted to $1-3 million per year. China's austerity program, however, caused sales to plummet to $200,000-300,000 in 1989, and little improvement is expected in 1990. C.J. Gabriel, marketing manager for Thermo, notes that the short-term outlook for sales is quite bleak: "If you had asked us two years ago, we would have said China would be a huge market, but now things are different."

Though most companies seem to be experiencing similar slowdowns, at least one US firm is seeing renewed interest in its products. Petronetics, a New York-based manufacturer of vacuum distillation equipment designed to reclaim and purify used oil, recently received an order from Daqing for five oil reclaimers. The equipment, which allows recycled oil to be used in place of new oil, provides for significant long-term savings. The use of oil reclaimers also prevents waste oil—which is often laced with industrial toxins—from being released with industrial wastewater, a common practice both in China and the United States. Haig Hachadoorian, president of Petronetics, says business opportunities in China seem to be on the rise. "We have only tapped the tip of the iceberg in the China market." —VL household coal combustion, as well as dust and erosion. Particulates contribute greatly to eye and lung problems in China, where respiratory illness is the second leading cause of death. Increased incidence of lung disease—particularly cancer—in China's cities has closely paralleled a rise in particulate levels. China has more cities with particulate levels exceeding World Health Organization guidelines—including Shenyang, Xi'an, Beijing, Shanghai, and Guangzhou—than any other country.

Solving China's air pollution problems is therefore impossible without developing alternatives to current coal-use methods. Decreasing overall use is unlikely, since coal provides roughly 70 percent of China's energy, and economic alternatives are few. Cleaner burning techniques using a combination of higher grade coal, washed or treated coal, and flue gas desulphurizing equipment—known as scrubbers—are extremely costly. Industrial facilities, which produce the lion's share of China's air pollution, usually cannot afford these types of improvements.

By some estimates, China's acid rain problem results in farm losses of ¥ 1 billion per year, and is thought to be more serious than acid rain in the northeastern United States and Scandinavia.

Some hope exists, however, that improving the efficiency of energy use will greatly reduce the amount of harmful emissions. While China's overall energy efficiency has improved in the past two decades, industry remains saddled with outmoded equipment. The use of more efficient boilers, for example, could drastically reduce emissions from improperly combusted coal at the same time that it reduces overall energy requirements.

Levels of air pollution in China's cities would also decline with increased energy efficiency. In cities like Beijing, where the air quality is some 16 times worse than in New York City, households routinely burn honeycomb-shaped charcoal briquettes for heating and cooking. The claim that briquettes burn more cleanly and efficiently than lump coal is only true if they are made with high-grade coal such as anthracite, and if the coal is washed before processing. Briquettes commonly used in China are probably not made to these specifications, and are thus likely to be more inefficient—so more briquettes must be burned. Poor-quality briquettes are also likely to contain more ash, so tend to be even more polluting than ordinary lump coal.

In some cities, however, efforts are underway to increase district or centralized heating systems to provide efficient, cleaner heat. By providing heat for a large building or block of buildings, such systems can obviate the need for individual apartments to burn briquettes. Efforts to promote the use of natural gas for cooking, particularly in northern cities, will also help relieve urban air pollution.

Waste management needed

Garbage, the third of the "three wastes," is a mounting problem for many countries, and China is no exception. Garbage problems in urban areas seem to be on the rise, even though China actively recycles much of its industrial and household wastes—steel and other metals are widely reused, for example, and night soil is used for fertilizer. In fact, China imports waste from other countries to be recycled and re-exported (*see* box).

Of greater concern, however, is the proper disposal of hazardous and toxic wastes. Disposal of hazardous chemicals such as polychlorinated biphenyls, better known as PCBs, is reportedly a major problem—by one account, electrical transformers containing PCBs are now being removed, but are left lying on factory floors because there are no adequate storage or disposal procedures. Managing both routine garbage and hazardous waste will be of increasing importance as China's population and infrastructure continue to expand.

Garbage problems in urban areas seem to be on the rise, even though China actively recycles much of its industrial and household wastes.

Promising indicators

Despite the gloomy outlook, there is a growing awareness in China of the need to protect the environment, even though the austerity program gives higher priority to other areas. Meeting with Chinese and foreign environmentalists in Beijing in February, Premier Li Peng pledged to continue efforts to protect the environment, but noted that China cannot afford much of the necessary technology. While China currently spends .5 percent of GNP each year on pollution control, and recently pledged to increase the level to .7 percent, Chinese and foreign experts alike feel this amount will be insufficient to cope with existing levels of pollution. They say expenditures in the 1-2 percent range are called for—targets that Chinese environmental officials also agree with. This level of expenditure is unlikely in the current fiscal climate. On paper, however, new regulations and tougher enforcement provisions seem to give greater authority to environmental protection bureaus at both central and local levels (*see* p. 38).

Foreign business opportunities

China must learn from developed countries that environmental prob-

Recycling America's Garbage

Along with substantially recycling its own waste materials, China is now importing an increasing amount of recyclable materials from other countries, including the United States. Associate Editor Vanessa Lide spoke with Jimmy Hsu, editor of World Recycling Markets, *about China's recycling activities.*

CBR: *How much waste does China currently recycle?*

Hsu: Since 1949, over 400 million tonnes of scrap iron and steel have been recycled in China, saving 1.24 million tonnes of iron ore and 450 million tonnes of high-grade coal that would have been needed to produce new steel. In addition, an estimated $32 billion on mine development and steel mill construction was saved by using recycled steel. Chinese paper mills typically use 60-80 percent recycled fibers; US paper mills in comparison use only about 15 percent recycled fibers.

CBR: *Why does China import waste materials from other countries?*

Hsu: China has been recycling waste from abroad—particularly paper, iron, and steel—for only the past two-three years, largely because of energy shortages. Recycling requires far less energy—and far less money—than processing raw materials. Recycled pulp, for example, costs 60-70 percent what virgin pulp costs, but China does not have the forest resources to meet its paper needs without either using recycled paper or importing virgin pulp. Buying recyclable materials from abroad is doubly attractive because there are no tariffs in China on imported waste materials.

CBR: *What—and how much—US garbage is now being exported to China?*

Hsu: Overall exports of recyclables to China are small, but growing. In 1988, some 116,000 tonnes of waste paper—covering 49 different categories—were shipped to China, along with over 30,000 tonnes of ferrous scrap. Preliminary analysis of 1989 export figures indicate a 25 percent increase over 1988 levels. I personally am involved in exporting plastics (low- and high-density polyethelene scraps) and old corrugated cardboard (OCC) to China. The plastic scrap is turned into shopping bags and the cardboard is made into paper bags, both of which are re-exported to the United States. For OCC, exporters net $20-30 profit per tonne, so large volumes are needed to cover shipping costs—usually 5,000-10,000 tonnes per deal. Even though 5,000 tonnes is a lot of waste paper, it's maybe only 5 percent of what New York City produces each week.

Glass and textiles, although not now exported, in the future may well become attractive to China to process and re-export.

CBR: *Is the US export of recyclables to China a short-term phenomenon, or is there a longer-term scenario?*

Hsu: Using recycled materials—both domestic and imported—is likely to remain a long-term partial solution to China's energy restrictions. Recycling is very labor intensive, so China, with its cheap labor costs, is particularly well-suited for wide-scale recycling. Exporting recyclables to China helps ease the growing solid-waste disposal problem in this country and makes recycling economically viable, despite high US labor costs.

Sanitation engineering is primitive in China, as evidenced by these workers cleaning city sewers in Jinan, Shandong Province.

At the very least, the need for better monitoring equipment and accurate environmental assessments may well mean sales for US firms that provide monitoring technology and expertise.

lems do not simply disappear if ignored. As industries elsewhere in the world face the expensive task of cleaning up decades of pollution, China's leaders would be wise to realize that devoting time and money today may help avoid costlier problems tomorrow. Western technologies for preventing new pollution and cleaning up existing problems could certainly be of great use in China. Though the cost of environmental products and technology makes it difficult for Chinese enterprises to afford them, growing environmental problems make it likely that outside help will soon be badly needed.

It seems likely that US companies will find increasing opportunities to play a role in China's environmental management programs. At the very least, the need for better monitoring equipment and accurate environmental assessments may well mean sales for US firms that provide monitoring technology and expertise. For joint ventures in China, tougher environmental regulations on new industrial facilities may in fact favor firms already adapted to stringent environmental standards in this country. On a larger scale, wastewater treatment facilities and clean coal technology projects are priorities in the World Bank's China program, and should continue to provide significant business opportunities in China (*see* box). Developing effective market strategies to meet China's environmental needs promises to be a challenge, but the potential—and the need—are great. 完

World Bank Environmental Projects in China

Growing global concern about the environment has put pressure on the World Bank to take a more active role in assessing and promoting the environmental needs of developing countries. As a result, the Bank has increased the number of its environmental projects and instituted more rigid environmental guidelines for non-environmental projects. A full third of all loans approved by the Bank in fiscal year 1989, for example, contained significant "environmental components." Such components include tribal protection and resettlement, reforestation, pollution control, fisheries, land-use surveys, and the development of institutions and incentives to foster sustainable use of resources.

China, a recipient of World Bank funds since 1981, has required formal environmental impact statements on all World Bank projects since 1984. Past World Bank activities in China include a number of projects with significant environmental components, such as the $56.9 million Da Xing An Ling Forest Fire Rehabilitation project and the Shanghai Sewerage project, which provided for the construction of sewers to dispose of wastewater from the city's central commercial district. Though US companies to date have not had large success in obtaining contracts for the environmental components of World Bank projects in China, the greater range of environmental issues to be covered in future Bank projects may provide US companies significant new opportunities.

Projects likely to be presented for approval in the next 12-18 months feature water supply and wastewater components as well as afforestation and pollution control. For example, the $72.5 million Liaoning Environmental project is intended to strengthen the water supply system in Shenyang, while the $100 million Rural Water Supply II project will improve access to clean water in several of China's poorest provinces. The $85 million Changchun Water Supply project will fund wastewater disposal and a $150 million project in southern Jiangsu will strengthen institutional, regulatory, and environmental management capabilities of provincial agencies. The $100 million Tianjin Urban project also includes an environmental sanitation component.

Since June 1989, however, there has been a marked slow-down in Bank activity in China (*see* p. 4). Only four projects have been approved by the Bank's executive board, on the grounds that they meet basic human needs criteria. The fact that the board on May 29 approved the $300 million National Afforestation project, however, may mean that environmental projects have bright prospects for future consideration. —Eliza Rosenbluth

Cracking Down on Polluters

How strictly will new environmental measures be enforced?

Lester Ross, Cheng Weixue, Mitchell A. Silk, and Wang Yi

While environmental protection is not high on China's list of priorities in the present austerity climate, the tougher policies and regulations promulgated in the late 1980s remain firmly in place. China's leaders, including Premier Li Peng, former head of the State Environmental Protection Commission, are aware of and concerned about the country's serious pollution problems, which permeate virtually every facet of rural and urban life. This means that recent pollution control regulations might be more firmly enforced than one would expect, given the other pressing problems China now faces. While foreign manufacturers in China might find that the new regulations increase regulatory and bureaucratic burdens, their enforcement will provide opportunities for US suppliers of pollution-control and environmentally sound technology to China, which cannot produce enough of this equipment.

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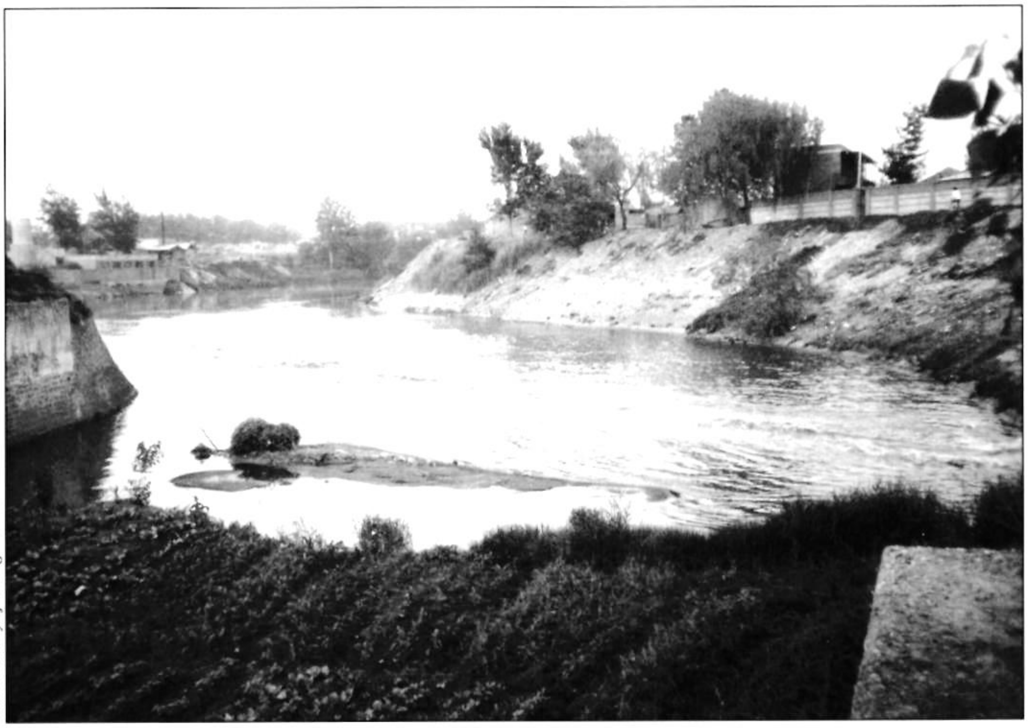

Photo courtesy of Cheng Weixue

Beijing's Tenghui River has been seriously contaminated by industrial wastewater.

The fact that environmental concerns, regulations, and personnel do not seem to have changed much in the wake of Tiananmen and austerity seems to indicate clearly that leaders consider effective pollution control vital to improving the living standards and future productivity of the population, thereby minimizing further grass-roots dissent. But because of the repressive political climate dating from last June, the kinds of popular protest that have prompted other governments around the world to adopt "green" policies are unlikely to be seen in China. In any case, it is difficult to say when the market will open up more fully to foreign services and technology—but both are badly needed.

Establishing norms . . .

China's awakening into greater environmental awareness began in the 1970s, but it was not until recently that comprehensive laws were passed to protect the environment. By far the most significant legislative change was the promulgation of the Environmental Protection Law (EPL) by the Standing Committee of the National People's Congress on December 26, 1989, some 10 years after the enactment of the trial implementation version in 1979. In addition, a number of new statutes and regulations have been issued recently, including the Urban Planning Law of the PRC (1989), the Environmental Noise Protection and Control Regulations (1989), and the Environmental Impact Statement Management Methods (1989).

In most respects, the new Environmental Protection Law codifies or reformulates changes that had been introduced earlier in the decade. For example, Article 18 of the EPL prohibits polluting industrial facilities from operating in the growing number of nature preserves or areas designated as environmentally sensitive. As of September 1989, China had established 482 nature preserves totalling some 240,000 sq. km. Resource-extractive industries like mining and forestry are not expressly prohibited in such areas, but may be subject to more stringent regulatory standards than elsewhere.

One notable change under the new EPL is that provincial and local regulators are granted greater authority and discretion than before. Under Article 13, environmental protection bureaus, which have now been organized down to the county level, must approve projects which will have an environmental impact before they can be submitted to the local planning commission for approval. This regulation affects virtually all large- and medium-sized industries, and reportedly 80 percent of smaller projects. Previously, the power of environmental regulators to enforce their mandate was more limited, since their approval was not required until after the local planning commissions had already approved the project. Of course, there remains a gap between law and practice, but the revised legislation appears to increase the agenda-setting power of environmental regulators.

Another significant development was the 1988 introduction of environmental norms in five areas: air pollution, water pollution, noise pollution, solid waste recycling and disposal, and urban "greenification." Applied to 32 cities, the norms are intended to spur implementation of the environmental directives of the State Economic and Social Plan by holding local officials accountable for environmental protection. Each official's annual evaluation is now based in part on the jurisdiction's progress in such areas as pollution levels and environmental policy implementation.

While decentralizing environmental regulation has many desirable aspects, the departure from uniform national standards and enforcement processes may overburden what is already an overtaxed and underfunded bureaucracy.

While no official is expected to show dramatic results on every norm, it does appear that flagrant disregard for environmental protection will do an official's career no good. Even before the norms were introduced, a senior official in Wenzhou was criticized in 1985 for poor environmental practices. More recently, Li Ruihuan was praised for his leadership on environmental matters in Tianjin, and similar accolades have been awarded to Shanghai officials.

Local leaders, such as vice governors and vice mayors, bear additional responsibility for environmental protection through their roles as chairmen of local environmental protection committees, which coordinate environmental policy at each level of government from the county on up.

. . . and enforcing them

These statutory and administrative changes have greatly strengthened the authority of the National Environmental Protection Agency (NEPA), which became an independent agency in 1988. Qu Geping continues to head NEPA, which has yet to acquire ministerial status.

At the same time, the revised EPL gives new authority and discretion to provincial and local environmental regulators. First, articles 9 and 10 permit provincial authorities to set more stringent emissions standards than those imposed by the central government, and also to set guidelines for pollutants for which Beijing has yet to issue standards. Under this provision, provinces can determine the maximum allowable pollution levels for both the overall environment—known as ambient levels—and for the levels each industrial facility can discharge. To date, no province has exercised this authority, but it is conceivable that areas with sensitive ecologies, such as Hainan, may be more inclined to adopt local standards before the central government does so.

While decentralizing environmental regulation has many desirable aspects, such as tailoring the formulation of ambient quality and other targets to provincial circumstances, the departure from uniform national standards and enforcement processes may overburden what is already an overtaxed and underfunded bureaucracy. For example, developing and implementing plans to regulate emission standards is particularly complex and costly. Without detailed plans akin to the state implementation plans (SIPs) for air pollution control in the United States, the new process may cause certain enterprises to be favored over others.

Greater authority to enforce environmental laws, both at the national and local levels, is an encouraging indicator of greater environmental awareness. Under Article 36 of the EPL, projects that begin operations without first installing required pollution-control facilities are subject to suspension and may also be fined by the environmental protection bureau with jurisdiction over the project. Even after a project obtains clearance to operate, environmental protection bureaus are now authorized to continue supervising industrial pollution-control facilities. Enterprises that dismantle or alter such equipment without prior approval by the environmental protection bureau—a serious problem given that pollution control measures sometimes encumber production—may be ordered by the bureau under Article 37 to reinstall the facilities.

Providing legal back-up

These types of enforcement measures have been augmented in several ways by the EPL. First, Article 14 grants clear authority to the environmental protection bureaus to conduct on-site inspections, which do occur, albeit on an irregular basis. Enterprises subject to investigation must provide an accurate accounting of their circumstances and necessary materials. Failure to do so is subject to warning or fine under Article 35(1). There is no requirement that a warrant be obtained before an on-site investigation is conducted, although the investigating agency is required to secure special approval from the provincial environmental control the pollution. By issuing warnings or fines to offenders, this provision fills an important loophole in existing laws through which industrial enterprises in urban areas under pressure to reduce pollution can transfer outmoded, inefficient machinery to subcontractors or affiliates in suburban and rural areas. This trative liability for polluters, the new law provides for criminal and civil liability in the event of pollution-related public or private property damages, personal injury, or death. Article 43 specifies criminal liability only for those persons directly responsible for such incidents. For civil liability cases, which are independent

Coping with China's New Environmental Regulations

R.D. Pummell, vice president of Operating Joint Ventures at Babcock & Wilcox International, spent four years in China as manager of Manufacturing Services at the company's Beijing joint-venture boiler factory. He spoke with CBR Associate Editor Vanessa Lide about how China's environmental regulations affect joint venture operations.

CBR: *Overall, are environmental regulations in China stricter than elsewhere?*

RP: China does not have stricter environmental regulations than other developing countries. Compared to developed nations, regulations are quite lax. However, China has progressed in the last few years and is implementing regulations to bring environmental issues to the surface.

CBR: *How important were environmental factors in establishing Babcock & Wilcox's joint venture?*

RP: The decision to create a joint venture in China was based on a number of factors, but as an environmentally conscious business, Babcock & Wilcox did not select China because of its less stringent environmental regulations. In fact, the Beijing boiler factory was soon required to upgrade equipment and facilities to meet environmental regulations that had been in effect prior to the joint venture, but had not been enforced.

There may well be new markets in China for the joint venture's efficient boilers if more environmental regulations are promulgated in the future.

CBR: *What is the impact of environmental regulations on day-to-day production?*

RP: It is important to control water and air effluents released from the plant. When I was in Beijing, though environmental regulations were the same for all companies in China, joint ventures were monitored more closely than the typical Chinese company. The joint venture was in fact asked to close down some old, inefficient boilers. The impetus for this decison was our proximity to Asian Games facilities and China's wish to provide a clean environment for the athletes and spectators.

On a more routine level, the joint venture had to obtain a permit to cut down any trees on the site, which involved a lengthy bureaucratic process. The joint venture was also required to participate one or two days a year in a mandatory reforestation initiative—we gave additional money and equipment to facilitate tree-planting operations.

CBR: *How is environmental monitoring conducted?*

RP: Monitoring is carried out through internal reporting, followed by periodic inspections by local authorities. The venture is required to employ an environmental engineer to conduct effluent tests on a specific schedule and report the information to the district and city environmental departments. This information is in turn used to determine the fees and fines to be imposed on the venture. The city and district environmental departments also perform spot checks of the company from time to time, as a follow-up to the effluent reports submitted by our environmental engineer.

CBR: *Have environmental regulations had a significant impact on your venture?*

RP: Environmental regulations have had a minimal impact on our joint venture because our policy is to minimize pollution. The biggest change, most likely, will be that in the future the monitoring process may be more strictly followed by the city, resulting in higher fees for effluent discharge.

protection department to conduct the investigation, according to Article 13 of the Water Pollution Prevention and Control Implementing Regulations (1989). While these enforcement measures are encouraging, it is still too soon to evaluate how effective the new regulations will be.

Second, Article 34 prohibits the transfer of polluting production equipment to enterprises unable to practice has been quite common in the metal-finishing and chemical industries. Under Article 38, fines or other sanctions may be applied to the person responsible for serious pollution incidents, with liability conceivably going back to the enterprise that provided the equipment.

Increasing liability costs

Along with the enhanced adminis- of administrative and criminal proceedings, the EPL allows the victims of pollution to file suit in court and request mediation and conciliation by the environmental protection department. Under Article 42, victims of pollution were further assisted by the institution of a three-year statute of limitations, which runs from the date on which the victim knew or should have known of the injury arising from the pollution. This period, which exceeds the two-year statute of limitations applicable to most other areas of civil law, is exceptionally generous to plaintiffs, since the discovery of injury element of the statute would appear sufficient to address the long-latency aspects of many environmental injuries. It should also be noted that the EPL does not include a statute of repose. Although presumably the 20-year statute under the General Principles of Civil Law of the PRC (1986) applies to environmental actions, it is conceivable that no statute of repose applies to such actions.

The EPL does provide an exemption from liability when the pollution arises from *force majeure*, provided that the polluter promptly takes remedial measures. Under Chinese law, proof of *force majeure* depends heavily on securing certification of the event from the appropriate agency or level of government. Securing such certification may be particularly difficult if it means that the victims of pollution are left without a remedy against a polluter, particularly if the prospective defendant appears to the Chinese to have deep pockets—as foreign-owned or joint enterprises do.

Improving incentives . . .

Beyond these more severe penalties, the new laws provide a financial incentive for industries to minimize pollution. For nearly a decade, China's system of effluent fees and rebates for pollution control has been one of the principal tools of environmental policy: some ¥1.6 billion of effluent fees were assessed in 1988 alone by all levels of government combined. The fee system motivates industrial enterprises to reduce their pollution by imposing fees for discharging various pollutants in excess of specified emission standards, providing a clear incentive to both enterprises and the parent ministries to reduce pollution. Effluent fees are currently imposed with more regard to water pollution than air pollution, largely because the former is easier to measure.

Despite its virtues, the effluent fee system suffered from several deficiencies. Most prominently, fees were generally set well below the marginal cost of pollution control, so fee assessments were more of a bother to enterprises than a strong deterrent to polluting. Also, fees were assessed on the basis of the concentration of pollutants discharged. Thus, an enterprise's assessment might be increased even if it reduced the overall volume of pollutants discharged, if the concentration of pollution in the remaining effluent increased. Effluent fees were also assessed on the basis of the most highly concentrated of the measured pollutants within an enterprise's effluent. In this way, an enterprise suffered no penalty for discharging other pollutants in addition to the most highly concentrated one.

While the rebate system was intended to make polluters pay for pollution, its potential was limited by the contemporary political economy. Enterprises in China are effectively immune from bankruptcy regardless of their pollution levels.

In theory, the fees have the dual benefits of inducing a reduction of emissions while financing pollution controls. Formally, enterprises found to be in violation of emission standards submitted a pollution-control plan to the environmental protection bureau, which would decide how much of the fee receipts to rebate back to the polluter to help finance the pollution control measures. In the past, up to 80 percent of the collected effluent fees were returned to the enterprises to cover pollution-control expenditures. While foreign-owned or joint-venture companies are eligible for the rebates, they are less likely to be considered in need of rebated funds.

The rebate system was flawed, however. Although the environmental protection bureaus were only supposed to return fees to those enterprises with a commitment to and a need for additional financing, the bureaus and enterprises tended to view the latter's 80 percent share as an entitlement.

Like other areas of public finance, in 1988 the rebates were partly converted from a grant-based system to loans. This reform was based on the assumption that loans would encourage enterprises to use rebated funds more efficiently. However, the force of this reform was blunted by the below-market 3.6 percent interest rate, which has been well under the rate of inflation in recent years.

Most important, however, was that while the rebate system was intended to make polluters pay for pollution, its potential was limited by the contemporary political economy. Enterprises in China are effectively immune from bankruptcy regardless of their pollution levels. Unprofitable polluters, despite their efforts, still often lacked the finances to address their problems, while the division of rebates among many thousands of claimants dissipated their impact. The system thus favored investment in small control projects located at the source—such as an individual plant's wastewater pipe or smokestack—but worked to the disadvantage of larger projects requiring multi-year investment and publicly-operated treatment facilities.

. . . by closing the gaps

Revision of the basis for computing fee assessments is being considered under the new system. Polluters may in future be assessed according to the quantity of pollutants discharged, rather than the concentration, thus rewarding enterprises that reduce—rather than merely dilute—their pollution. Moreover, in cities such as Shanghai, enterprises are already being assessed on the quantities of each pollutant discharged, rather than only the principal pollutant, forcing enterprises to adopt more comprehensive pollution control measures.

Another significant change in enforcement is the rapid introduction of pollution discharge permits for water pollution through the Water Pollution Prevention and Control Implementing Regulations (1989) and, to a lesser extent, for air pollution. By requiring polluters to obtain discharge permits and then self-report their emissions (similar to the US National Pollutant Discharge Elimination System), the environmental protection bureaus build a database to facilitate enforcement and create more efficient pollution-control strategies. In conjunction with the effluent fees, which are a direct charge against pollution, the permit system acts as a barrier to commencing or continuing to pollute. Outside monitoring of pollution will also continue, and will hopefully become more regular. Self-reporting, however, provides the best means for pollution assessment at regular intervals.

Specifically, polluters are required to apply for permits to discharge pollutants. To qualify, they must report the quantity of total discharges of various pollutants. In principle, this enables the regulatory authorities to determine whether the local environment can absorb additional pollution from new sources. So far, the environmental protection bureaus' ability to review the establishment of new pollution sources seems more hypothetical than real, but over time the potential exists to regulate industrial development in areas where pollution exceeds ambient standards.

In the interim, the permit system is used to better allocate regulatory resources. In more than 50 cities where the permit system has been introduced, regulators are able to focus on the major sources of pollution while ignoring for the time being the myriad of smaller sources that are politically—as well as administratively—harder to control, but which account for about 10 percent of the aggregate pollution load. Moreover, as in the United States, the prosecution of enterprises for misreporting discharges or for technical violations of their permits is likely to become an important enforcement tool.

Increased restrictions on foreign companies

For foreign-owned companies and joint ventures, the new rules pose some tighter environmental restrictions, although China's regulations are still likely to be less stringent than those in other countries. At the national level, Article 29 of the EPL forbids the importation of technology or equipment that does not comply with domestic environmental regulations. Although this provision has protectionist implications, its main purpose appears to be to dissuade Chinese importers from importing outmoded equipment—a common practice. Article 29 is also designed to discourage the practice of stripping imported machinery of pollution controls to reduce costs, also a common negotiating issue. For instance, beginning in 1990, all imported motor vehicles must have crankcase emissions controls, a requirement that will apply to locally built vehicles in 1991.

Greater attention is also warranted at the local level, since expanded power of local environmental protection bureaus means that foreign investors must ensure that local authorities are informed and have no objections to anticipated pollutant discharge levels, even if no national emission standards exist. Similarly, the provision against transfer of polluting equipment within China, although primarily aimed at domestic enterprises, implies that foreign-invested enterprises (FIEs) potentially face liability to the extent that they rely on subcontractors. Enterprises may therefore be faced with the burden of conducting some version of due diligence or obtaining representations from the prospective transferee before conducting the equipment transfer, particularly since the limits of liability have yet to be established.

The status of water discharge permits should also be carefully assessed. If the discharge permits are effectively implemented on a widespread basis, the regulatory burden on all enterprises, including FIEs, will increase. Although environmental protection should improve, enterprises will have to comply with more complex permit requirements as they negotiate for more liberal discharge permits and compliance schedules. In this respect, the new permit system may aggravate the existing problems that investors encounter in the Chinese bureaucracy, at least in the short run.

Greater sales opportunities

As China's environmental regulations enter a more sophisticated and aggressive stage, the market for foreign vendors of pollution-control equipment should improve. As the standard percentage of rebated assessment fees has been cut from 80 to 50 percent, funds will be reallocated from small-scale, enterprise-based investments to larger scale, more extensive facilities. This reallocation is desirable because water pollution control often features economies of scale that favor publicly-operated treatment works serving large, multiple-source collection systems. For foreign vendors, this regulatory change will mean a substantial increase in demand for municipal sewage treatment plants. Between 1986-88, in fact, 63 municipal sewage treatment plants were under construction.

Photo courtesy of Cheng Weixue

Inefficient industrial enterprises—such as this cement factory in western Sichuan Province—are major sources of air pollution in China.

The fact that in some cities enterprises are now being assessed on the basis of the total quantities of each pollutant discharged, rather than on the principal pollutant alone, should enhance the potential market for foreign vendors of point-source pollution control technology, especially with regard to water pollution. Additional opportunities are likely for environmental consulting companies, as well as firms that produce environmental monitoring equipment.

Finally, the small but growing domestic environmental industry in China may provide additional opportunities for joint venture and licensing arrangements—some 2,500 factories in 1989 were involved in the production of various environmental products. Once the investment climate in China improves, foreign vendors may well find more interest in joint ventures or technology-licensing arrangements than in direct product sales.

International assistance

Though some international organizations and investors are currently wary about investing in China, there is little global dispute about the importance of environmental protection. For international donor agencies in particular, there is a growing awareness of the importance of undertaking infrastructure projects that do not have adverse environmental impacts. China, anxious for international agencies to resume the flow of financial and technical assistance, is likely to promote non-controversial projects for pollution control and environmental protection. Indeed, until China's relations with the international community take a substantial turn for the better, the international agencies themselves are likely to favor human needs projects—including those that improve the environment—in order to avoid vetoes by the donor governments. Foreign companies with expertise and technology to help address China's environmental ills are likely to find heightened interest in their services—and new business opportunities. It is in everyone's interest to help China start cleaning up its act now, in order to avoid more costly environmental rescue operations later. 完

China's Elusive Panda

The controversial new auto manufacturer looks to succeed where others have stalled

Eric Harwit

Panda Motors, the largest wholly foreign-owned enterprise in China with proposed investment of up to $1 billion, is a topic of great speculation—and not just among automotive-industry watchers. The company's ties to the Reverend Sun Myung Moon's Unification Church created a small sensation in the foreign press when the venture was publicized last fall, and the size of the investment, coupled with the inexperience and reticence of its backers, have caught the attention of many China hands.

The Chinese are also paying the project a great deal of attention. Panda's potential challenge to China's domestic auto companies—including joint ventures—has divided the Chinese central government over support for the project, though local backing appears quite strong. Though Panda representatives in Huizhou city, Guangdong Province, near the site of the future factory, refuse to discuss publicly details of their plans or organization until the first car rolls off the assembly line, press reports and information from private interviews provide a relatively comprehensive picture of the maverick automobile company.

Who—and what—is Panda?

Panda Motors is part of an umbrella organization called the Virginia Business Enterprise Group, which was incorporated in September 1988 and is currently headquartered in a suburb of Washington, DC. The motivating force behind the company seems to be the Unification Church. The Group's chairman, Charles Kim, is a naturalized American citizen originally from Korea. Kim is president, chief executive officer, and sole shareholder of Panda. The automobile company is a partnership of several international companies, including HWH Holding Group of West Germany, which manufactures automobile parts; the Tong Il Co., a South Korean transmission maker; and ASC Design Inc. of Detroit.

The company currently has about 15 Chinese and 10 American employees working full-time in China, including three former Volkswagen-America plant managers. The China-based staff is responsible for overseeing the construction of the first factories in Huizhou, though ultimate decision-making authority rests with the Hong Kong office and American headquarters. The entire company includes about 50 people, according to an anonymous employee, and is chaired by Douglas MacArthur II, former US ambassador to Japan and nephew of the famous general.

The Panda plan

Panda plans to develop several auto assembly plants in China over the next 10-15 years, for a total investment of around $1 billion. Panda was established with registered capital of $100 million, and by the end of 1989 had reportedly attracted $170 million from unnamed South Korean financiers based in the United States.

Unlike the other foreign auto manufacturers in China—Chrysler (AMC), Volkswagen, and Peugeot—Panda has invested in a wholly foreign-owned enterprise (WFOE) instead of a joint venture. According to a Panda representative in China, the company chose this structure because a joint venture would have taken longer to negotiate. Perhaps more significant, under China's current austerity program there is little State money to put into a new auto enterprise.

The company plans to finish building the first assembly plant by the end of 1990, then install stamping equipment purchased from General Motors's (GM) Hamilton, Ohio plant. Panda has also bought GM's Chevrolet 4-cylinder engine tooling. Equipment for the factory is to begin arriving in China in August.

According to Chinese press reports, Panda's goal is to make 50,000 cars in 1991, 100,000 in 1994, and 300,000 in 1995, though a Panda employee admitted that these targets are ambitious. The company will not reveal the type of car it plans to produce, but according to the American embassy in Beijing, the car will be small, with a 1.32 liter engine and a price of about $4,000. Unless Panda copies an existing model, however, it will probably have great difficulty meeting its target production dates, as developing a completely new model typically takes many years and millions of dollars.

Advantages in volume

Panda's potential strength is its

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plan to keep its costs low by operating on economies of scale. By pledging to export all output (in line with a 1986 law governing WFOEs) Panda can import the parts it needs without paying the prohibitive import taxes joint ventures producing for the local market must pay. Panda can thus avoid the slow, tedious process of sourcing parts from local suppliers. As an exporter, Panda will also avoid austerity restrictions that apply to China's other auto manufacturers. Theoretically, the company can begin producing in large numbers immediately, and when it decides to localize parts manufacture, will be able to place large enough orders that Chinese companies providing parts and components will be willing to invest in the appropriate technology. Panda reportedly might help finance some local suppliers.

These factors may allow Panda to avoid some of the problems of other automobile joint ventures. In 1989, for example, Volkswagen produced only 15,700 Shanghai Santanas, Chrysler's Beijing Jeep produced 6,630 Cherokee vehicles (in addition to 32,500 locally produced BJ212L Jeeps), and Guangzhou Peugeot turned out fewer than 5,000 cars. At such low numbers, the cost of sourcing local parts is prohibitive, and the percentage of locally produced parts therefore remains low: By the end of 1989, Volkswagen's five-year old joint venture had localized only 31 percent of the Santana's parts, and Peugeot only about 20 percent of its model 505. After four years of production, Beijing Jeep, the oldest joint-venture car manufacturer in China, also bought about 30 percent of Cherokee Jeep parts in China last year. Yet because the cars themselves are to be sold in China, the joint-venture manufacturers must pay high import duties on components, and are thus squeezed whether they localize or not—a situation Panda hopes to avoid.

Targeting markets

Though Panda may not encounter the foreign exchange balancing problems of the joint-venture auto manufacturers, it also cannot count on the State to purchase its product—State bailouts benefited all three foreign automakers in China in 1989-90. Panda's ultimate success, therefore, depends on its ability to

The most attractive market for Panda cars is probably China. Panda could present its sales in terms of import-substitution for Japanese cars, as Panda vehicles would be assembled with Chinese, rather than foreign, labor.

find foreign markets. Southeast Asian nations, though attractive at first glance, generally have restrictions on importing assembled vehicles, making them less promising markets. Economic reforms in Eastern Europe may make those nations more receptive to Panda vehicles, and should the economies of Central and South American nations improve, those countries might also be good markets for the inexpensive cars.

In the end, however, the most attractive market for Panda cars is probably China. By the end of the 1990s, some Chinese citizens may be able to afford to pay $4,000-5,000 for a private vehicle. Furthermore, the large numbers of Japanese passenger cars imported in the early and mid-1980s will need to be replaced. It is possible that Panda might then appeal to the Chinese to open their market in order to satisfy this demand, and to keep the company profitable. Panda could present its sales in terms of import-substitution for Japanese cars, as Panda vehicles would be assembled with Chinese, rather than foreign, labor. (Panda would still have to pay import duties if the percentage of localization were too low, however). But such a scheme would need to be approved by central government officials in Beijing. Currently, these leaders seem to be divided over support for the company, and, if Panda is truly hoping for domestic market access, it is taking a large risk.

Mixed signals from Beijing

After Panda had presented its project plan to Huizhou officials in December 1988, according to Hong Kong's *Wen Hui Bao* newspaper, the central government was concerned that Panda was in fact positioning itself to sell its product on China's domestic market. At the beginning of 1989, the State Council organized a small group of experts to go to Huizhou to investigate the project. The group gave a positive assessment, and the State Council, convinced that Panda would export all its cars, approved the proposal. Zhao Ziyang, then Communist Party general secretary, reportedly took a personal interest in having the project certified. In April 1989 Guangdong Province put its chop on the proposal, and Panda was ready to go.

The events of last June shook Panda, particularly the fall of Zhao, who had supported the project. The subsequent June 27 ground-breaking ceremony, though not publicized until September, may have been meant to win favor with the new Beijing leaders by providing them with an example of substantial new foreign investment at a time many foreigners were frightened away by the unstable situation in China.

Chinese Premier Li Peng seems to have given at least tacit approval to the project. Li visited the plant site in February 1990, and made some optimistic remarks to the media about foreign investment in China. Immediately before the trip, Li and Communist Party General Secretary Jiang Zemin met a group of former US Congressmen in Beijing, whose travel to China had reportedly been arranged in part by Panda officials. Li and Jiang enjoyed an opportunity to project the image of business as usual—and perhaps to improve their own stature—as they posed alongside the American delegation, which also paid a separate visit to the Huizhou factory site.

At present, there seem to be few reasons for the central government to oppose the venture. As one Panda employee pointed out, should the company fold after a year or two, China will have lost none of its own money, and will have gained one or two factory buildings. Money will have come into China to pay construction workers, and if the factory goes into operation, workers will acquire valuable skills. A profitable Panda will also pay income taxes.

Despite such positive features,

Panda does have opponents in Beijing. These people fear the negative repercussions on foreign investment should the highly visible project fail. Panda detractors also predict competition with domestic Chinese car manufacturers, such as the Shanghai Volkswagen joint venture, should Panda ever gain access to the domestic market. Furthermore, the new car company may pull away skilled employees from China's own car factories. The China National Automotive Industrial Corp. (CNAIC)—China's automotive bureaucracy—therefore is reportedly attempting to discourage both its own employees and those working for domestic automobile corporations from working for or associating with Panda. Panda officials in Huizhou maintain they are willing to hire untrained workers.

Panda also reportedly has opponents in the upper levels of the State Planning Commission (SPC). Since Panda's approval, the leadership of the SPC has changed hands from Yao Yilin to Zou Jiahua, former Minister of Machine Building and Electronics (MMEI). At the MMEI, Zou had direct authority over CNAIC, and the current lack of CNAIC support seems to be related to Zou's promotion.

Relations with Beijing are further affected by Panda's distance from the capital. As other Guangdong ventures have found, lack of easy access to central government officials can hurt their chances of obtaining special favors. Still, with instability looming in the background of Beijing politics, Guangdong may prove to be a very comfortable lair for Panda.

A hearty Huizhou welcome

Despite the mixed reception in Beijing, Panda has been very well received in the South. The mayor of Huizhou, Li Jinwei, was reportedly so eager for Panda to come to his city that he personally lobbied Beijing authorities to allow the project to be placed under his jurisdiction. This warm reception contrasted with the reactions of Shanghai, Changchun, and other more industrialized cities, which refused to accept Panda because of the company's inexperience.

In exchange for the auto company's investment in Huizhou, the city has taken several steps to support the project. First, the municipal government has reportedly raised ¥200 million (about $42 million) to build two thermal power plants capable of generating 60 megawatts of power. The local government is also funding construction of transmission lines that can bear 220,000 and 110,000 volts, as well as installation of 6,000 telephones for the factory area.

Perhaps most importantly, Panda will be provided with a deep-water port capable of serving ships weighing 35,000 dead-weight tons (dwt). The port, in the nearby coastal city of Autou, is only 47 nautical miles from Hong Kong and 68 kilometers from the Shenzhen Special Economic Zone. Autou will be crucial to the success of the Panda project, as Panda will be dependent on it for importing machinery and supplies and for exporting finished cars. Panda has pledged to develop power facilities, roads, and living facilities in the area, where it has already leveled 400,000 sq. m of hilly Guangdong land. The company will also give priority to Guangdong residents for non-technical factory positions.

Guangdong's governor, Ye Xuanping, and all provincial authorities, including the Guangdong Foreign Economic Relations and Trade Commission (FERTC), reportedly support the venture. Ye supposedly has arranged for Chen Zutao, former head of the CNAIC, to be a shadow adviser to Panda. Chen's connections with the central automotive bureaucracy could provide an important tool for improving Panda's tenuous relationship with the central government. Given Guangdong officials' relative lack of experience with automotive ventures, the expertise and support of the central bureaucracy could still prove vital if Panda is to succeed.

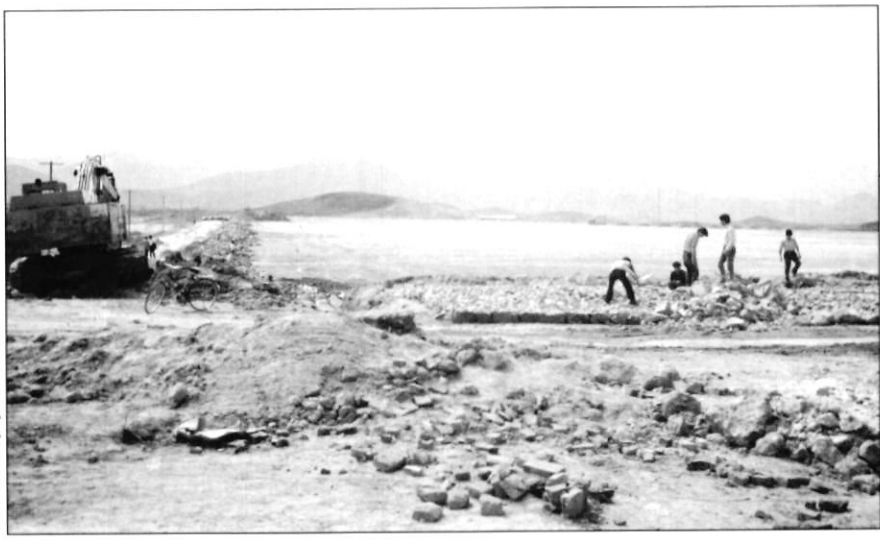

Photo courtesy of Eric Harwit

Workers build a road to the site of Panda's future stamping and assembly plants in Huiyang County, Guangdong. The plants are scheduled for completion at the end of this year.

Uncertain prospects

Though the local Chinese government has extended a warm welcome, and Panda has made very quick progress in moving from its initial overtures to actual groundbreaking, the company faces several problems that could delay its 1991 production target.

First, the company has yet to hire any Chinese production-line workers or staff for the Huizhou plant. Though some Chinese automotive workers are eager to sign on with Panda, the lack of official CNAIC support is a barrier. Furthermore, the domestic and joint venture automobile companies can be expected to jealously guard their best workers. Panda says it can train its own workers—perhaps at the old GM Ohio plant it purchased, which is to be turned into a training and engineering course—though such training will take time.

A more serious problem may be the current delay in completing the port facility at Autou. A Panda employee said the port would probably not be done by the end of 1990, even though Panda wants to begin shipping equipment to China this summer. If the port is not ready, Panda would have to use the unloading facilities in Hong Kong or Guangzhou, which would be more costly. Guangdong's Governor Ye may turn to China's transportation ministry for aid in rapidly developing the port.

Perhaps most significant, however, is that Panda remains outside China's national economic plans, which favor the domestic vehicle manufacturers and joint ventures. This factor could seriously jeopardize the company's attempts to coordinate localization of production and guarantee a supply of raw materials. The fact that Guangdong's economy seems more suited to light industrial ventures than such heavy industrial ventures as auto manufacturing could compound this problem.

A further complicating factor for Panda may be its ties to the Unification Church. Though Panda representatives prefer to remain silent about their backers, Reverend Moon himself noted in a December 1989 *International Herald Tribune* advertisement that he is "helping to create an automobile production city in Southern China in order to enhance the People's Republic of China's export opportunities." Panda's treasurer, Pak Bo-Hi, is reportedly Reverend Moon's chief aide, and the Unification Church is claimed to hold 28 percent of Tong Il, one of Panda's partners.

The Beijing government has reportedly known since the spring of 1989 about the Unification Church ties, but seems to be ignoring them. The Chinese press has not mentioned Reverend Moon's connections to the company, and the issue does not seem to be a major problem for leading government officials. Panda's orders to its employees to limit discussion of the company's background may keep many Chinese ignorant of the church connection. Panda's public relations people, for the moment, seem to be managing the issue sucessfully. Ohio officials, however, did encounter some resistance among local residents suspicious of the ties to Moon when deciding to grant a tax break to Panda for the purchase of the GM plant.

One step at a time

For now, Panda is plodding along, solving problems as they arise. The company's skill in developing relations with central and local Chinese authorities has been key to its progress thus far. These ties have been nurtured through strategic spending to convince local authorities of the venture's sincerity, and through propaganda ploys—such as the Congressional delegation—to win the support of national leaders.

If Panda succeeds, Guangdong Province will benefit from the infrastructure and employment opportunities the company will provide to the Huizhou area, which is not developed enough to attract much foreign investment, particularly near the factory site. The multiplier effect of a large-scale auto plant would also bode well for potential parts manufacturers, both locally and nationwide. At the national level, Shanghai Volkswagen, Guangzhou Peugeot, and possibly Japanese exporters stand to lose if Panda is allowed to sell cars within China.

Should Panda encounter problems with transporting machinery, hiring skilled workers, or entering the Chinese domestic market, however, it seems doubtful the company could survive without more central government support than it now enjoys. If Panda folds, it would tarnish the reputations of some Chinese leaders—particularly the more enthusiastic local authorities. It is hard to say, however, what the impact would be on foreign investment, given the venture's unorthodox nature. Regardless, China would be left with a large, level field, some useful equipment and infrastructure, and another reminder to approve WFOE ventures more carefully in the future. 完

Interview

John Kamm, president of the American Chamber of Commerce in Hong Kong, led a delegation of US business representatives to Washington, DC in May to discuss China's MFN status and other issues with US legislators. During his visit he discussed with outgoing CBR Editor Sharon E. Ruwart his agenda for improving conditions in Hong Kong for American companies there.

Championing US Business Interests

CBR: Tell me about your career in Hong Kong.

Kamm: I left the United States to live in South China in 1972, working first as a teacher in Macau. At the end of 1972 I moved to Hong Kong, where I taught sociology at Chinese University and did fieldwork in the New Territories. In 1974, I became a freelance journalist...I did a master's at Harvard in 1974-75, though that year was broken up with trips back to Asia. In 1975, I established my own company in Hong Kong called Primary Sources, [and in 1979] I started representing commercial agencies. I set up the first foreign representative office in Canton [Guangzhou] in 1979, and maybe the second or third in Shanghai in 1980. I specialized in representing chemical companies, and one of my clients was Diamond Shamrock. After two years, they bought my company, which I continued to run. In 1986, Diamond was purchased by Occidental Chemical, and now I'm vice president and regional manager for Occidental Chemical, in charge of the Far East. We have plants in Singapore, Thailand, and Japan, and offices in eight countries.

CBR: At this point, China's MFN status looks likely to be renewed. How has Hong Kong been affected by the controversy surrounding the renewal?

Kamm: The debate on MFN has both negative and positive consequences. On the negative side, people will have to take into account the possible removal of MFN a year or two hence. That will no doubt affect to some extent investments in plants in China.

On the positive side, for the first time Hong Kong and South China are being taken into account in a major foreign policy debate. There's a lot of sympathy towards Hong Kong, and a growing awareness and recognition that Guangdong Province is indeed a fountainhead of reform. People are not inclined to put it in the same basket as, say, the northern areas, the central government, Beijing—so some useful distinctions have been drawn.

I have not encountered anyone in this debate who has seriously challenged my assertion that Hong Kong would be badly hurt by removal of MFN, nor have I found anyone who challenged the assertion that Hong Kong is a very good friend and ally of the United States. When you get them to acknowledge that point, even the most rabid anti-MFNers have to pause and sit back. They admit it will hurt Hong Kong; they admit Hong Kong is a good friend. They're left in a situation where they have to say: Irrespective of the fact that they're good friends and they're going to be hurt, we still say pull MFN. Then you say, well, what are you going to do about helping Hong Kong? Obviously it's very difficult to deal with.

CBR: How might this distinction prove helpful on other issues down the road, such as obtaining recognition for Hong Kong as a separate customs territory after 1997?

Kamm: That is something I'm working on, and I'm beginning to plant the idea in conversations with policymakers in this country. Hong Kong is a separate contracting party to the GATT—in April 1986, China and the UK signed memoranda to that effect. So in that sense Hong Kong is already treated as a separate customs territory, and there is a precedent. The Basic Law provides for Hong Kong to negotiate and conclude its own commercial, trade, financial, and economic treaties, so the constitutional basis for separate treatment after 1997 is there. In terms of other types of arrangements, like textile quotas, intellectual property conventions, and export licensing systems for technology, Hong Kong does have de facto separate status. So I think the prospects are good that the United States can and will eventually conclude a separate treaty with Hong Kong.

CBR: Singapore seems to be gearing up to take on some of Hong Kong's regional influence after 1997. How much competition does Singapore present to Hong Kong?

Kamm: In some respects, Singapore is a competitor; in other respects, Singapore complements Hong Kong. It competes with Hong Kong in such things as regional headquarter sites. However, in some things, such as investment flows and trade flows, there's an awful lot that goes on between the two places that's complementary. Interestingly, Singapore has a brain drain which is proportionately as big as Hong Kong's, so they certainly have their problems as well.

CBR: How do the two places compare in attractiveness to skilled workers? Is Singapore draining emigrants from Hong Kong?

Kamm: In attracting new people, it all boils down to this: You've got a raw immigrant. How do you make that individual a functioning, productive member of the community? Hong Kong has much more of a freewheeling, non-governmental approach to the development of the individual and his or her talents. In Singapore, you have to conform to a certain mold; there is much less freedom of expression and freedom of communication, particularly in the media. The *Asian Wall Street Journal* is still a banned publication in Singapore. It's a much more regulated society. A lot of Hong Kong people don't like Singapore for that reason. They feel much freer in Hong Kong. Will that change after 1997? We don't know, but by and large, it is not at all certain that Hong Kong people will fit into and feel comfortable in Singapore.

CBR: What about US companies? Do they talk about moving their headquarters to Singapore?

Kamm: They do, and sometimes it's not necessarily the headquarters, it's functions—putting your [human resources] department or your data center in Singapore, or vice versa. I haven't heard of too many companies

The headquarters of the Chinese democratic opposition is in Paris; the Norwegians gave the Dalai Lama the Nobel Peace Prize—but you don't see them taking MFN away. They have done things that have been effective in expressing the outrage of their peoples—but they don't interfere with their national interest.

that have shifted their regional headquarters from Hong Kong. We continue to have companies coming into Hong Kong and setting up. The week I left, General Motors announced they were setting up their regional headquarters in Hong Kong. So I haven't really seen a net outflow of regional headquarters—actually, I'm still seeing an increase in the American presence. And some of the work the Chamber is doing now is designed to encourage that.

One of the issues we're working on is access to high technology by Hong Kong firms in the run-up to 1997, because there's a question as to how Hong Kong will be treated as a destination for high technology after 1997. We want to ensure that firms in Hong Kong continue to have access to at least the same level of technology as they do now, and one of the best ways of doing that is to try to liberalize treatment now. We'd like to see Hong Kong treated as liberally as possible under whatever scheme emerges from the dismantling of the present COCOM system.

CBR: What else is on your AmCham agenda?

Kamm: Obivously, over the last few months China sanctions and MFN have taken up 10-12 hours a day of my time, overshadowing other things. Lifting the Vietnam embargo is another issue. We're the first American chamber overseas of any size that's called for lifting the embargo, and we got the Asia-Pacific Chambers of Commerce (APCAC) to support our resolution at their most recent meeting in Jakarta. That was a step in the right direction, and now we're here [in Washington] working on it. This is going to be a much more difficult issue than even MFN.

Another major issue is the reform of American immigration law. We're trying to enhance emigration prospects for Hong Kong people, with two caveats: First, any reforms carried out for Hong Kong must be part of a global package of immigration reform. Second, whatever changes take place, as American businessmen we want those changes to promote retention of key people in Hong Kong. It's a tricky issue. We're advocating such things as increasing the US quota for Hong Kong immigrants from the present 5,000, which is quarter-country status, to 20,000, or full-country status. We're also for the concept, put forth by Congressmen Barney Frank and Steve Solarz, that the immigrant visa have a long validity period. At present, people get it and they've got to leave in four months. To just give out 20,000 more visas and tell them they've got to leave in four months is counterproductive. We're also for reducing the residency requirement period [for US citizenship] from five years to three years, universally.

Another hot issue for us is school places for our children in Hong Kong. We've gotten the Hong Kong government to give us two buildings. The Chinese International School is getting accreditation in the American system; the curriculum is becoming more and more an American curriculum, while retaining part-time Mandarin language study. They will administer one of the buildings. We haven't decided what to do with the other one.

CBR: What is the chance of the Vietnam embargo being lifted?

Kamm: I don't think we're going to see any movement on it until the five-party talks [on Cambodia] now going on in New York come to some conclusion. If the Australian plan works and we have UN-sponsored elections and a UN peacekeeping force, you're going to have a pretty quick resolution to the problem of Vietnam, both diplomatic relations and the trade embargo. Our position is: Don't mix diplomatic relations and the trade embargo. Let's do the China model, and have trade relations before diplomatic relations; even a long period between the two. We're not politicians; we don't advocate any particular solution. What irks us is that all of our competitors, bar none, are in there—the Koreans, the Taiwanese, the Hong Kong Chinese, the French, the British, the Japanese—only the Americans are out. To us, it's purely a commercial issue. If everyone else is allowed to be in there, why should we be denied?

> *What irks us about the Vietnam trade embargo is that all of our competitors, bar none, are in there. To us, it's purely a commercial issue. If everyone else is allowed to be in there, why should we be denied?*

When we raised the issue in Washington on this visit, we received a polite hearing. The attitudes toward Vietnam are very negative. They [US policymakers] view lifting the embargo purely and simply in terms of helping Vietnam. They don't see this as in any way helping US business.

They've got to understand there are different ways of attacking the trade deficit. If we are the only country in the world to consider taking MFN away from China, the only country that continues to embargo trade with Vietnam, we project an image overseas as a country that is quick to grab trade and use it as a bludgeon every time there's a political dispute. That really affects our ability to do business overseas. The headquarters of the Chinese democratic opposition is in Paris; the Norwegians gave the Dalai Lama the [Nobel] peace prize, which got the Chinese all worked up—but you don't see them taking MFN away. They have done things that have really been effective in expressing the outrage of their peoples, and they still give loans, they still have trade—they don't interfere with their national interests. They see trade in terms of their national interest; largely, I guess, because throughout their history trade has always been important and they haven't been self-sufficient. It's only in the last decade, really, that the United States has had a greater than 10 percent share of its GNP in foreign trade.

CBR: What does Vietnam really offer for American business?

Kamm: The most recent figures from our delegation that visited Saigon eight weeks ago show that there are now 150 concluded joint ventures with a contracted value of $1 billion. A lot of that is offshore oil, but there's also the telecommunications venture the Australians have set up, a lot of Hong Kong textiles, some food processing, and of course, tourism is big too.

I'm trying to open up markets. I led the first American commercial delegation to Laos last year. It was interesting—it's like a northern province of Thailand these days—the *baht* is practically the country's currency. There are opportunities even in Laos, though it's a very poor country. There are natural resources—it's heavily forested; let's hope it's not denuded by the Thais, who are buying up vast tracts. There's apparently a good prospect of offshore oil.

CBR: What has been the effect on Hong Kong of Taiwan's warming commercial relations with China?

Kamm: One thing is that it's damn difficult to get seats on planes flying out of Hong Kong into China! Flying to a place like Qingdao, for instance, you can hardly get a seat—you have to book months in advance. There are nothing but Taiwanese going in there.

To a certain extent, the flow of Taiwanese has offset the drop in visitors from other countries to Hong Kong, so in terms of total arrivals, tourism has not been hurt—it hasn't been as catastrophic as it could have been [after Tiananmen].

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中外贸易 China Business

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US-China Business Council member firms can contact the library to obtain a copy of news sources and other available background information concerning the business arrangements appearing below. Moreover, firms whose sales and other business arrangements with China do not normally appear in press reports may have them published in *The CBR* by sending the information to the attention of the Business Information Center at The US-China Business Council.

中外贸易

SALES AND INVESTMENT THROUGH
May 15, 1990

Foreign party/Chinese party
Arrangement, value, and date reported

Agricultural Commodities

Other

Chicago Commodities Futures Exchange (US)/Research Institute for Commerce and Economy, Ministry of Commerce
Will train managers for grain wholesale market and commodities exchange. 2/90.

Agricultural Technology

Investments in China

Chia Tai Group (Thailand)/Beijing Dafa Animal By-products Co.
Expanded investment in Dafa-Chia Tai Co. Ltd. joint venture by $22.25 million (¥105 million). Total investment: $36 million (¥170 million). 3/90.

Sentech (Japan)/Beijing Agriculture and Forestry Bureau
Established joint venture for greenhouse cultivation. $300,000. (JP:60%-PRC:40%).

Abbreviations used throughout text: BOC: Bank of China; CAAC: Civil Aviation Administration of China; CAIEC: China National Automotive Import-Export Corp.; CATIC: China National Aero-Technology Import-Export Corp.; CCTV: China Central Television; CEIEC: China Electronic Import-Export Corp.; CEROILFOODS: China National Cereals, Oil, and Foodstuffs Import-Export Corp.; CHINALIGHT: China National Light Industrial Products Import-Export Corp.; CHINAPACK: China National Packaging Import-Export Corp.; CHINATEX: China National Textiles Import-Export Corp.; CHINATUHSU: China National Native Produce and Byproducts Import-Export Corp.; CITIC: China International Trust and Investment Corp.; CITS: China International Travel Service; CMC: China National Machinery Import-Export Corp.; CNCCC: China National Chemical Construction Co.; CNOOC: China National Offshore Oil Corp.; CTIEC: China National Technical Import-Export Corp.; ETDZ: Economic Technological Development Zone; ICBC: Industrial and Commercial Bank of China; INSTRIMPEX: China National Instruments Import-Export Corp.; MLI: Ministry of Light Industry; MMEI: Ministry of Machinery and Electronics Industry; MOE: Ministry of Energy; MOTI: Ministry of Textile Industry; MPT: Ministry of Posts and Telecommunications; NA: Not Available; NDSTIC: National Defense, Science, Technology, and Industry Commission; NORINCO: China North Industries Corp.; SEZ: Special Economic Zone; SINOCHEM: China National Chemicals Import-Export Corp.; SINOPEC: China National Petrochemical Corp.; SINOTRANS: China National Foreign Trade Transportation Corp.; SITCO: Shanghai Investment and Trust Corp.; SPC: State Planning Commission.

Other

Japan/Guizhou and Sichuan
Loan extended for purchase of fertilizer, insecticide, and agriculture equipment. $3.4 million (J¥500 million). 4/90.

Japan/MOFERT
Grant offered for purchases of farming machinery, chemical fertilizers, pesticides, trucks, and other agricultural goods in Sichuan and Guizhou provinces. $3.4 million (J¥500 million). 3/90.

Banking and Finance

China's Imports

NCR Corp. (US)/BOC
Sold check-clearing system, four Tower 32/650 computers, 250 NCR 7720 printing machines, and three NCR 6760 sorters to be installed in Guangzhou. $3 million. 3/90.

Olivetti Systems and Networks, a subsidiary of Ing. C. Olivetti & C.S.p.A. (Italy)/Agricultural Bank of China
Installed 11 color graphics automated-teller machines with Chinese-language capability. 4/90.

Export-Import Bank (US)/CNOOC
Extended loan to finance engineering services for gas-processing plant to be purchased from McDermott International, Inc. $9.8 million. 2/90.

World Bank
Extended 35-year, interest-free credit for earthquake relief and reconstruction in Shanxi and Hebei provinces. $30 million. 2/90.

Investments in China

Bank of East Asia (HK), NA (Japan)/two Chinese banks
Plan to establish joint venture in Dalian. 4/90.

Standard Chartered Bank (HK)
Established representative office in Hangzhou. 1/90.

Other

Kuwait
Will extend loan to finance six projects: Chengdu Aluminum Foil Plant, Kaifeng Carbon Plant, Zhanjiang oil wharf, Yantai-Weihai Railway, Nantong container berth, and second-phase construction of Xiamen International Airport. 3/90.

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Extended loan for use as general working capital. $20 million. 2/90.

Banque Paribas (France)/BOC, Shanghai Branch
Will extend government loans and export credits. $30 million. 2/90.

67 Banks (Japan)/BOC
Credit drawn from part of $2 billion line arranged in July 1985. $500 million. 1/90.

Chemicals and Petrochemicals

China's Imports

La Banque de l'Union Europenne (France)/BOC
Extended export credits to support construction of joint-venture glass production line involving a French chemical company. $9.7 million (FFr55 million). 3/90.

Investments in China

Amoco Chemical Co. (US)/Xinhlun Co. and Zhuhai Textile Industrial Corp.
Will establish joint-venture petrochemical corporation in Zhuhai to produce PTA, a raw material for polyester fiber. $200 million. (US:80%-PRC:20%). 4/90.

Chia Tai group (Thailand)
Purchased factory buildings in Ningbo to establish a processing project for petrochemical products and an enterprise for processing and exporting forage. 3/90.

Pacific Chemical Co. Ltd., a joint venture between The Dow Chemical Co. (US) and Stauffer Australia Ltd. (Australia)
Has begun operations to produce chemical raw materials in Ningbo. 3/90.

Roussel-Uclaf Co. Ltd. (France)/Tianjin Pesticide Factory and Tianjin Dagu Chemical Plant
Established Tianjin Roussel-Uclaf Pesticide Co. Ltd. joint venture to produce deltamethrin pesticide. $7 million. 2/90.

Air Liquid International Corp. (France)/Caohejing Hi-Tech Park
Will jointly produce super-high purity gases for use in production of integrated circuits. 1/90.

Other

Kincheng-Tokyo Finance Co. Ltd., subsidiary of Bank of Tokyo (Japan), and CCIC Finance Ltd., a joint venture between Industrial Bank of Japan Ltd. (Japan), China Resources (Holdings) Co. Ltd (Hong Kong), and First Chicago Corp. (US)/People's Construction Bank
Extended loan for completion of ethylene plant in Shanghai. $56 million. 3/90.

Construction Materials and Equipment

Investments in China

NA (Japan)/China Building Materials Research Insititute
Began construction of a vertical kiln cement production line at Zhangdian Cement Factory in Shandong Province. $7.2 million (¥34 million). 3/90.

Mitsui & Co. Ltd. (Japan) and Onoda Cement Co. Ltd (Japan)/China Huaneng Investment Co. and Tung Guan Co.
Established joint venture in Dalian to produce cement mostly for export. $138 million (JP:51%-PRC:49%). 2/90.

Alcan (Canada) and Nippon Light Metal Co (Japan)/China National Non-ferrous Metals Industry Corp.
Signed agreement to sell 1,000 tonnes of high-quality aluminum extrusions to Japan through Shenzhen-based joint venture, Nonfemet International Aluminum Co. Ltd. (CN:22%-JP:22%-PRC:55%) 3/90.

Consumer Goods

Investments in China

NA (Hong Kong)
Will establish Jiangsu Qiaoxin Shoe Co. Ltd. joint venture to manufacture shoes for export. 4/90.

Avon Products Inc. (US)/Guangzhou Cosmetics Factory
Will provide technology and training for production and sale of line of 50 make-up and skin care products. $1 million. 3/90.

Kobayashi Kosei Co. Ktd. (Japan)/Hangzhou Kongfengchun Cosmetics Manufacturing
Will begin production of basic cosmetics such as high-grade skin cream at Chunsili joint venture in Hangzhou. 2/90.

World Co. Ltd. (Japan) and Yamazaki Meriasu Co. Ltd. (Japan)/Shanghai Garment Corp.
Began production of knitwear garments mostly for export. 2/90.

Other

United Nations Fund for Population Activities, Federal Republic of Germany, Holland, Italy, United Kingdom, and United States/Nanjing No.2 Pharmaceutical Factory
Established production line for oral contraceptives. $2.9 million (¥13.7 million). 4/90.

Electronics and Computer Software

China's Imports

Maschinen und Apparatebau Gesellschaft (Austria)/CN Instruments Import/Export Corp.
Sold special enamel-insulated production line to Shantou Special Enamel-Insulated Wire Industrial Co. (Guangdong). 1/90.

Sony Corp. (Japan)
Will supply video production equipment under International Labour Organization National Tourism Training Project. $320,596. 2/90.

Investments in China

Nippon Seigyo (Japan)/Jiangsu Computing Technology Institute
Will establish joint software-development venture in Nanjing. 5/90.

Philips N.V. (Netherlands)
Will establish joint venture to produce flat-screen color picture tubes. $2 billion. 4/90.

NEC Corp. (Japan)/Beijing Library
Inaugurated operation of new ACOS 630 computer system. 3/90.

Unic Corp. (Japan)/ Shanghai Research Institute of Tool and Die Technology
Established joint venture to develop software for computer-aided design and manufacturing systems. 3/90.

NA/Stone Corp.
Established joint venture to develop and begin production of translation computer in 1992. $4 million. 3/90.

NA (Japan)
Zhongli Computer Co. joint venture established in Shanghai to manufacture items for export. 3/90.

Yokogawa Electric Corp. (Japan)/Xiyi Yellow River Controls, Xi'an
Established joint venture to produce distributive control systems, used to monitor flow of materials in processing plants such as oil refineries. 1/90.

Other

NA (Japan)/Hunan
Established computer training center to train senior computer technicians for China and develop software for Japan. 3/90.

Engineering and Construction

Investments in China

United Nations Development Programme
Is providing aid for 3-year engineering plastics alloying and filling project. $377,000. 1/90.

Other

United Nations Development Programme/MOFERT
Will finance water resources management project in north China. $3.4 million. 5/90.

Environmental Technology and Equipment

Other

United Nations Development Programme/MOFERT
Will finance project to protect ozone layer by studying and checking excessive levels of chlorofluorocarbon emissions. $690,000. 5/90.

I Kruger A/S (Denmark)/CMC
Began construction of Tiedong Sewage Disposal Plant in Handan, Hebei Province under grant from Danish Government. $4.6 million (DKr 30.2 million). 3/90.

Asian Development Bank
Approved grant for country study on environmental considerations of energy development. 2/90

Asian Development Bank
Established research and administration center for water resource development projects in Beijing and Tianjin. 1/90.

Japan-China Exchange Center/State Environmental Protection Bureau
Will exhange personnel and information and carry out joint research on water resources in canals drawing from the Luanhe River. 1/90.

Food and Food Processing

China's Imports

Bucher-Guyer (Switzerland)/Hailin Heijialun Beverage Co-operative Co.
Will supply food-processing machinery in return for supply of blackcurrant juice in four-year trade agreement with financing from Landerbank (Austria). $2.7 million. 2/90.

Investments in China

McCormick & Co, Inc. (US) and PepsiCo (US)/Shanghai Foodstuffs and Sundries Co. Ltd.
Established Shanghai McCormick Seasoning & Foodstuffs Co. joint venture to produce and package herbs, spices, sauces, seasonings, jams, and other goods for export. $3 million (US:60%-PRC:40%). 4/90.

USSR/Huating Group, Shanghai
Will establish joint venture Shanghai-Leningrad Co. Ltd. to produce foodstuffs, beverages, and other commodities. 4/90.

Coca-Cola Co. (US)/Tianjin Beverages Factory, Foodstuff Industrial Joint Development Co., and China Light Industrial Foreign Economic and Technological Cooperative Co.
Began production for the domestic market of Jinmeile soft drink at Tianjin Jinmei Beverages Co. Ltd. joint venture. 3/90.

Nisshin Seika (Japan)
Established Qingdao Nisshin Food Machines joint venture and began production of biscuits at Qingdao Nisshin International Food Development joint venture. 2/90.

Fast Lane Burgers Co. (US)/China Federation and Great Wall Restaurant Co.
Established American hamburger restaurant. (50-50). 1/90.

Lam Soon Co. (Hong Kong)
Established edible oil milling plant joint venture in Shandong. $3 million (HK$23.37 million) (HK:60%-PRC:40%). 1/90.

Lam Soon Co. (Hong Kong)
Expanded investment in edible oil milling plant equity joint venture in Guangdong. $40 million (HK:60%-PRC:40%). 1/90.

Machinery and Machine Tools

China's Imports

Ernst Krause & Co. (Austria)/CMC
Will sell diesel engine production equipment to two internal combustion plants, Chengdu and Shaoguan. $8.5 million. 3/90.

Fanuc Ltd. (Japan)/Beijing Machine Tools Research Institute
Will sell technology for production of numerically controlled equipment to produce machine tools. 2/90.

Investments in China

Chinese Everbest Machinery Enterprises Co. Ltd. (Hong Kong)/Worm Gear Transmission Center
Established Tianjin Everbest Gear Co. Ltd. joint venture to produce worm wheel reducers and gear reducers. 3/90.

West Germany Technology Co-operation Co. (FRG), CPG Continent Co. (FRG), and South Germany Plastics Centre (FRG)/Chengdu No. 1 Radio Factory
Established electric mold center joint venture. $10.6 million (¥50 million). 3/90.

NA (Japan)/CHINATUHSU Zhejiang Tea Branch
Established Zhejiang Kawasaki Tea Machinery Company joint venture to produce tea-leaf-picking machines, tea bush trimmers, and other tea plantation machinery. $1 million. 3/90.

Sumitomo Metal Industries Ltd. (Japan) and Mitsubishi Heavy Industries Ltd./Chongqing Special Steel Works and Chongqing Iron & Steel Design Institute
Established Chongqing Si-You Continuous Casting Machine Technical Engineering Co. joint venture to design continuous casting machines. $94,222 (JP:45%-PRC:55%). 2/90.

China's Investments Abroad

USSR/Wuxi Washing Machine Plant
Will establish washing machine plant in Kuibyshev, USSR. 1/90.

Other

NA (Austria)
Loan extended for construction of car battery production plant in Beihai, using only foreign-owned capital and technology. $5.6 million. 4/90.

NA (Finland)/Guangzhou Electric Cable Plant
Loan extended to finance purchase of electric cable production assembly line. $5 million (FMk 19.8 million). 4/90.

Medical Supplies and Equipment

Investments in China

Nippon Koden Kogyo (Japan)/Shanghai Electronic Medical Equipment Co. Ltd.
Established Shanghai Koden Electronic Medical Equipment joint venture to manufacture small-sized electrocardiographs. $1.9 million. 2/90.

China's Investments Abroad

USSR
Established dispensary for traditional Chinese and Western medicines and techniques in Amur, Soviet Union. $430,000. (USSR:50%-PRC:50%). 2/90.

Other

UNICEF and United Nations Fund for Population Activities
Will provide assistance to 20 counties in Sichuan for Health Centres for Women and Children. $3.4 million. 3/90.

UNICEF and United Nations Fund for Population Activities
Will provide assistance to 16 counties in Tibet for Health Centres for Women and Children during 1990-94. $800,000. 3/90.

Italy/Provincial People's Hospital of Chengdu
Granted aid to set up provincial first aid center in Sichuan Province. $2.5 million. 1/90.

United Nations Fund for Population Activities
Established joint gerontological research center. $600,000 (UN) and ¥1.6 million (China). 1/90.

Metals and Minerals

China's Imports

Sumitomo Metal Group (Japan)/Changsha Metallurgy and Mining Design Institute
Transfer of technology for energy-saving sintering ignition furnaces and burners. 3/10

Investments in China

Nittetsu Shoji Co., subsidiary of Nippon Steel Corp. (Japan) and Mitsui & Co. (Japan)/Shum Yip Trading Co. and Nanhai Oil Shenzhen Development and Service Corp.
Began operation of joint-venture steel-cutting plant in Shenzhen SEZ. $8 million (JP:65%-PRC:35%). 3/90.

China's Investments Abroad

Misurata Iron & Steel Complex (Libya)/Wuhan Iron & Steel Complex
Will send 350 technical advisers to Libya to work in hot and cold rolling mills and a steel-smelting shop. 5/90.

Other

NKK (Japan)/Ministry of Metallurgical Industry
Began negotiations for sale of seamless steel pipe facilities of Keihin Ironwork. 2/90.

Packaging, Pulp and Paper

China's Imports

Heidelberger Druckmaschinen (FRG)/State Education Commission
Sold 35 multi-color sheet offset presses under World Bank Textbook Development Project. $16.4 million. 12/89.

Mueller Martini (Switzerland)/State Education Commission
Sold automatic perfect-binder and gatherer under World Bank Textbook Development Project. $2 million. 12/89.

Investments in China

NA
Yida Plastica Co. Ltd. joint venture began production of plastic products and recycling of waste plastic products in Anqing, Anhui Province. 3/90.

Other

World Bank/ Investment Bank of China Tianjin Branch
Provided loan for import of technology to update Tianjin's dyeing, printing and packaging industries. $150 million. 12/90.

Petroleum and Natural Gas

China's Imports

Hewlett Packard GmbH (Austria)
Will supply gas chromatograph under United Nation Industrial Development in Castor Oil Processing Project. $102,534

Investments in China

Atlantic Richfield Co. (ARCO) (US) and Nissho Iwai Corp. (Japan)/CNOOC
Planning joint project to develop liquified natural gas fields offshore near Hainan. Production expected to begin in 1994. $1 billion. 4/90.

Bakir Marine Energy Pte. Ltd. (Singapore)/CNOOC
Signed contract for development of Wei 11-4 oil field in Beibu Gulf. 4/90.

British Petroleum Development Co. Ltd. (UK)/CNOOC
Signed two contracts for oil exploration in Bohai and South China Seas. 4/90.

Occidental Eastern Inc. (US), Ampol Exploration Ltd. (Australia), and AGL Petroleum (Australia)/CNOOC
Signed contract for to develop contract area 17/15 in Pearl River estuary basin. 4/90.

Other

Japan/Junggar Coal Mine and Dongqu Coal Mine, Shanxi
Began construction on two coal projects financed by loans from Japan. $1.1 billion (J¥164 billion). 4/90.

Export-Import Bank (US)/CNOOC
Extended 10-year loan to finance Liaodong Bay oil project. $11.5 million. 2/90.

Pharmaceuticals

Investments in China

Ciba-Geigy AG (Switzerland)
Joint venture to manufacture and market products for treatment of diseases in poultry, sheep, and cattle. $20.3 million (SFr30 million). 2/90.

NA (US)/Qilu Pharmaceutical Plant
Established joint venture to produce antibiotics mostly for export. $6.6 million. 1/90.

Power Plants

Investments in China

USSR/Huaneng Nanjing Power Plant
Construction has begun on two 300,000 kw supercritical generators. $0.32 billion (Rmb1.5 billion). 3/90.

Ngan Chuen Co Ltd (HK)/Humen Thermopower Plant
Signed 10-year contract for two 25,000 kw generators. $67 million. 1/90.

Neste Oy (Finland)
Sold power system in Guangdong and Guangxi for 24 microwave relay stations. $2.5 million. 1/90.

Tokyo Electric (Japan)/Shanghai Electric Power Bureau
Resumed work on power transmission and distribution network for Shanghai.

Other

France
Extended loan for construction of 1.2 million kw Guangzhou Conghua pump-storage power station to ensure safe operation of Dayawan Nuclear Power Statlon. 4/90.

Export-Import Bank (US)
Approved export credit guarantees for sale of electric power-generating equipment. $39.5 million. 3/90.

Property Management and Development

Investments in China

Peninsula Group (HK) and Kumagai Gumi (Japan)
Reached agreement to assume management of Palace Hotel in Beijing. 4/90.

Nomura Securities Co. Ltd. (Japan)/Jinjiang Holding Company
Opened Garden Hotel joint venture in Shanghai. $0.12 billion (J¥17.6 billion). 3/90.

Tokai Bank Ltd. (Japan), Chubu Electric Power Co. Inc. (Japan), and Toyota Motor Corp. (Japan)
Joint-venture firm Nonjing Grand Hotel Investment Co. decided to begin construction. $41 million (J¥6 billion) (JP:50%-PRC:50%). 3/90.

Shanghai-Jin Ming Housing Co. Ltd. (Shanghai-Hong Kong joint venture)
290-flat residential project opened at entrance of the Hongqiao Economic Development Zone. $30 million. 2/90.

China's Investments Abroad

Argentina
Chinese technological firms will build two industrial zones near Buenos Aires on property given by Argentinian Government to Chen Shijie, general manager of China Technology Development Corp., Zhuhai. 3/90.

NA (Taiwan)
Began construction of Taiwan Mountain Villas in Xiamen, to include 160 luxury villas, 190 high-class villas, and 25 blocks of high-class apartment houses. $28 million. 3/90.

Cheung Yip Investment Co. Ltd. (HK)/Construction and Development Corp.
Established joint venture to construct Fuhao Garden comprising luxury apartments, tennis court, supermarket, and other facilities in Xiamen. $14.8 million (Rmb70 million). 2/90.

Other

Shangri-La International Hotel Management Pte. Ltd, subsidiary of Kuok (Singapore) Ltd. (Singapore)
Took over management of Portman Shanghai Hotel from the Peninsula Group (Hong Kong). 4/90.

Ships and Shipping

China's Imports

Sumitomo Corp. (Japan)
Sold 35-tonne hydraulic crane under World Bank Ningbo and Shanghai Ports Project. $1.2 million. 3/90.

Kalmar LMV (Sweden)
Sold six 25-tonne container forklifts under World Bank Ningbo and Shanghai Ports Project. $1.4 million. 1/90.

Singapore Shipway & Engineering (Singapore)
Will construct three high-speed rescue vessels for sale to China. $30 million. 1/90.

Sumitomo Corp. (Japan)
Sold seven cranes under World Bank Ningbo and Shanghai Ports Project. $1.2 million. 1/90.

Other

American President Lines (US)
Opened offices in Shanghai, Tianjin, and Dalian. 4/90.

Telecommunications

Investments in China

AT&T (US) and Philips N.V. (Netherlands)/Shanghai Optical Communication Engineering Corp.and Shanghai Telecommunications Equipment Factory
Began operation of joint venture to produce optical fiber communications equipment. Registered capital $14.5 million. 4/90.

ALCATEL-CIT, a subsidiary of Generale d'Electricite S.A, Cie. (France)/Beijing Telecommunications Administration
Started up first and second batches of E10B exchanges. $127 million (¥600 million). 3/90.

Textiles

China's Imports

EMS Inventa (Switzerland)/Xiamen Liheng Polyester
Sold equipment for polyester fiber plant. $6.8 million (SFr10 million). 1/90.

Toray (Japan)/Shanghai Petrochemical Industry Corp.
Sold plant to produce industrial polyester filaments. $14 million (J¥2 billion). 12/89.

Investments in China

Toyo Mena Kaisha Ltd. (Japan) and Esquel Enterprise Ltd. (Hong Kong)/Foshan Municipal Government and a local manufacturer
Set up Golden Field United Textile Ltd. joint venture in Foshan to dye yarn and produce textiles. $7 million (J¥1 billion) (JP:11%-HK:16.5%-PRC:72.5%). 3/90.

NA (Hong Kong)/Shanghai Chunfeng Textile Mill
Established Shanghai Chunhua Textile Co. Ltd. joint venture to produce staple rayon. $5.1 million. 3/90.

Picanol NV (Belgium)/CTIEC
Sold 176 shuttleless looms to Guangzhou No.1 Cotton Mill for denim production. $4.6 million (BFr162 million). 1/90.

China's Investments Abroad

USSR
Nanjing Woollen Mill to run Chinese fabrics sales agency in Kiev. 1/90.

Other

Credit Suisse (Switzerland)
Extended loan for purchases of Swiss textile machinery.

Transportation

Investments in China

Asian Development Bank/Ministry of Railways
Extended loan in various currencies to finance Xiaoliu railway project. 2/90.

NA (US) and NA (USSR)/China Northwest Airlines
Will purchase five Boeing-757s and one Soviet made Tu-154 to open new air routes to Hong Kong and Japan and expand service in northwest China. 4/90.

McDonnell Douglas Corp. (US)/CATIC and Shanghai Aviation Industrial Corp.
Extension approved for production of 20 MD-80 twin-jet airliners. 4/90.

Pratt & Whitney (US)/CATIC and Shanghai Aviation Industrial Corp.
Order placed for 20 JT8D-200 engines to power McDonnell Douglas MD-80 jets. $118 million. 4/90.

Societe Francaise d'Etudes et de Realisations de Transports Urbains (France), Institut de Management et d'Urbanisme de la Region Ile-de-France (France), Societe Nationale des Chemins de Francais (France), and Bureau Central d'Etudes Port les Equipements d'Outre-Mer (France)/Shanghai City Planning and Design Institute, Shanghai Railway Institute, and Shanghai Railway Bureau
Studying proposals for construction of 100 km tramline in Shanghai. 3/90.

Other

Chao Associates (HK)/CITIC Hong Kong
Purchased 49 percent of shares in Tylfull (HK), which owns 38 percent of Dragonair. 1/90.

Dragon Airlines Ltd. (Hong Kong)
Dragonair took over air routes from Hong Kong to Beijing and Shanghai from Cathay Pacific Airways Ltd., leasing aircraft from Cathay Pacific until July. 4/90.

Federal Republic of Germany, France, and United States
Will extend government loans for construction of Shanghai subway. $319.7 million (FRG:85%-FR:6.7%-US:8.3%). 3/90.

Japan Overseas Economic Cooperation Fund (OECF) (Japan)
Will extend loan to build 415 km canal between Nantong and Ganyu along the coast. $201 million (Rmb951 million). 3/90.

Kuwait Foundation
Will extend loan to fund construction of Shenzhen airport. $2 billion. 3/90.

Export-Import Bank (US)
Extended loan from Private Export Financing Corp. of New York. $12.7 million. Also extended grant to help US companies win contracts to supply signalling devices and other equipment for Shanghai subway system. $10.4 million. 2/90.

Miscellaneous

China's Imports

Audiotek Oy (Finland)
Will supply language laboratories under International Labour Organization National Tourism Training Project. $108,094. 2/90.

Motorola Inc. (FRG)
Will supply equipment under United Nations Industrial Development Organization project to prevent drug abuse and trafficking through rural development. $1.17 million. 2/90.

Japan
Joint venture to build China's largest golf course in Shenyang. Due for completion in 1995. $14 million (J¥2 billion). 1/90.

State Committee for Science and Technology (USSR)/State Science and Technology Commission
Cooperation in science and technology. 1/90.

United Nations Development Programme
Is providing assistance for 5-year project to plant poplars in east China. $768,300. 1/90.

United Nations Development Programme
Provided instruments and equipment for project to improve technology for production and development of enzymes. $387,000. 1/90.

Investments in China

Formosa Plastics (Taiwan)
Received approval from Tawian government to establish petrochemical plant which may be built in Xiamen. $300 million. 4/90.

China's Investments Abroad

NA (Canada)/China Writing Instruments Association
Will set up two factories in Canada to produce pencils and wooden boards for making pencils. 3/90.

Other

International Development Association (IDA) of the World Bank Group, and Federal Republic of Germany/State Education Commission
Will provide soft loans under Vocational and Technical Education Project to expand and upgrade secondary vocational and technical education systems and technical teacher training systems. $91 million (WB:55%-FRG:8%-PRC:37%). 3/90.

Mera Travel Services (Hong Kong) and Citybus Co. (Hong Kong)
Invested in bus tour operation to involve 19 Chinese cities. $2 million. 3/90.

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Asia Series

In Bangkok, good things come in enormous packages.

There was a time in Thailand when pachyderms meant political power, and a white elephant was worth its weight in gold. While times have changed—elephants today are used to symbolize good luck instead of wealth—there are still a number of big surprises in store for the businessman in old Siam.

Mai pen rai.

Pronounced "my pen rye," this is translated as "it doesn't matter," and it conveys the Thai attitude toward business and life as well. It means it's best to avoid open conflicts and negotiate patiently —shouting will get you nowhere.

Shy Thais.

Thais seldom invite foreigners home—entertaining is done in restaurants. Use a private dining room at the Oriental Hotel (tel. 236-0400) for special occasions.

The how of the wai.

Instead of a handshake, try the Thai form of greeting, the *wai* (pronounced "why"). Bring your palms together, fingers up, and bow—it's most respectful.

Northwest notes.

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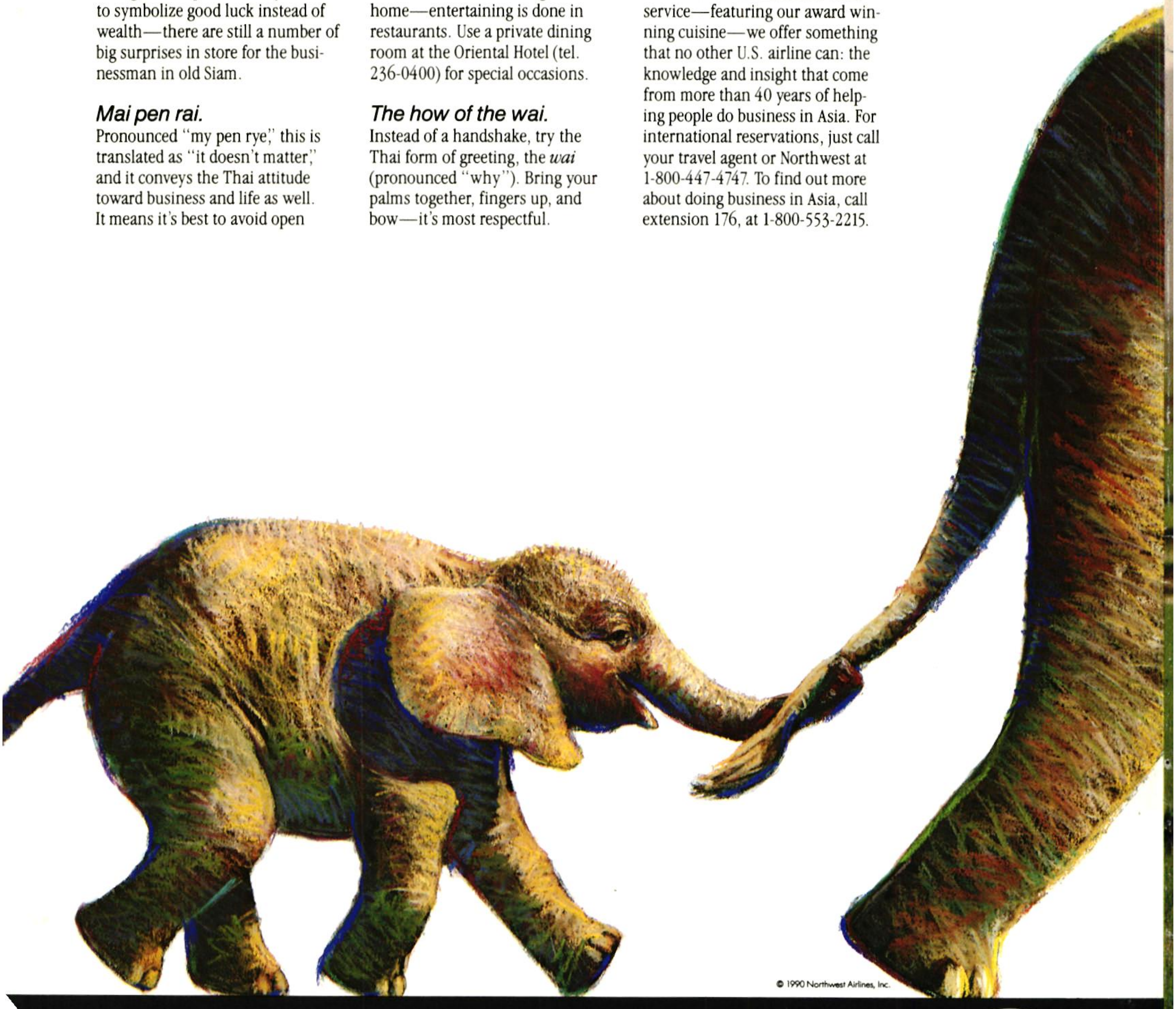

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