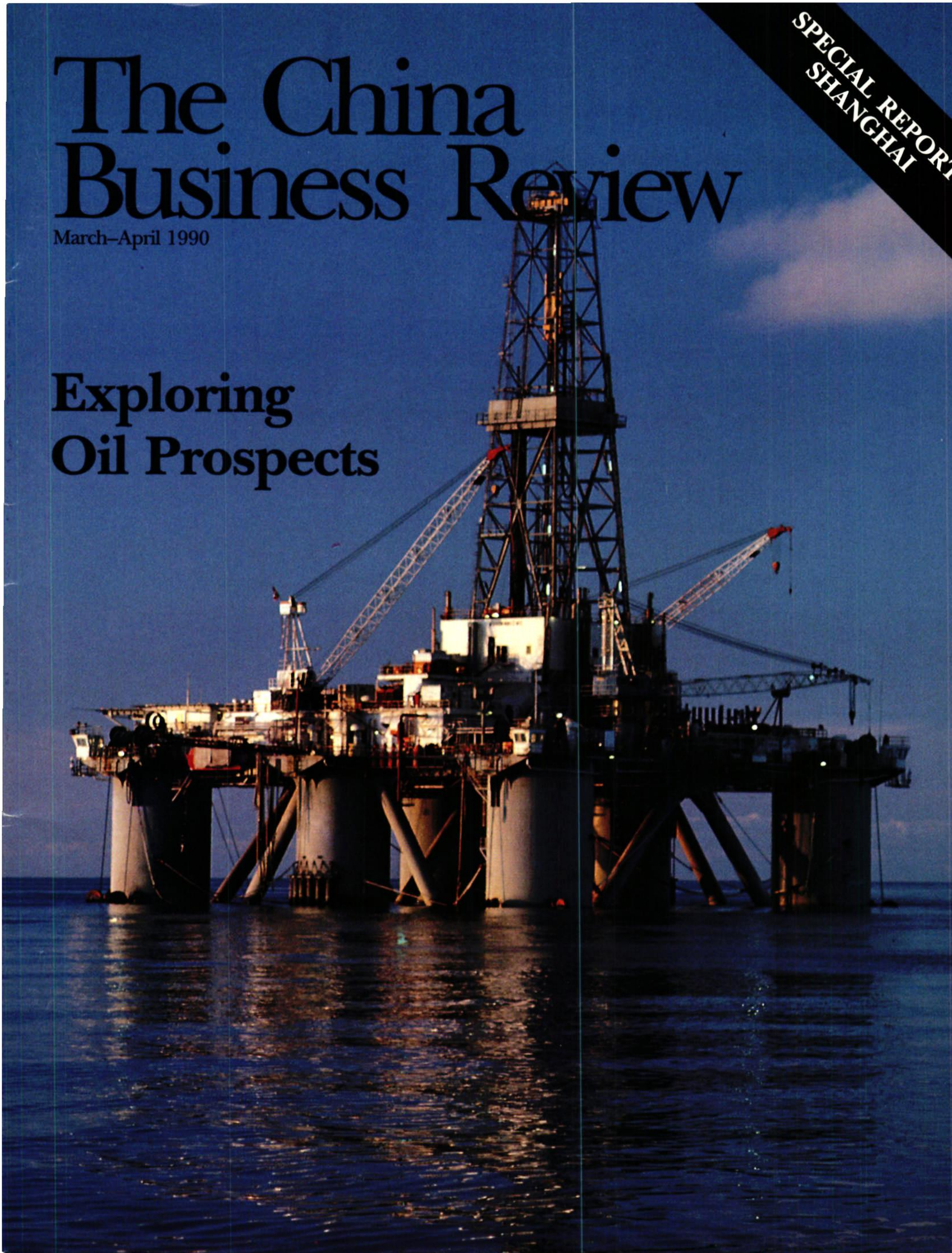
# The China Business Review

March–April 1990

SPECIAL REPORT: SHANGHAI

## Exploring Oil Prospects



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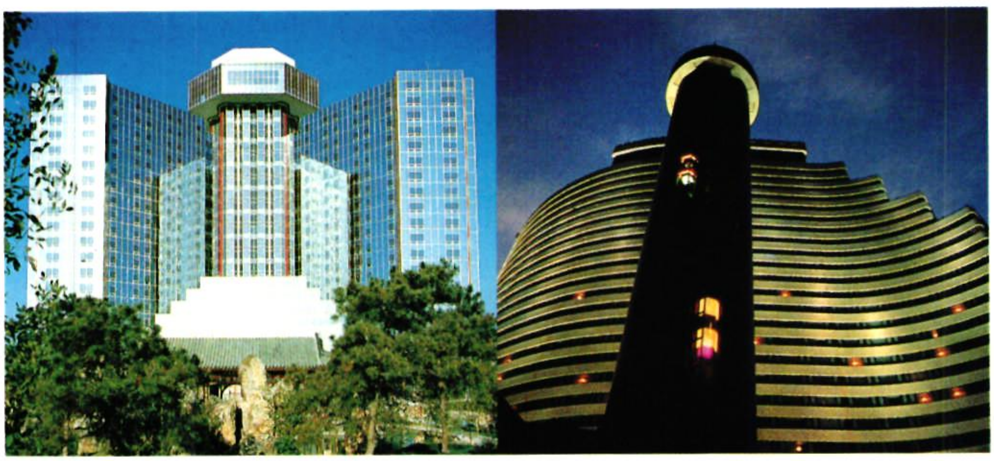

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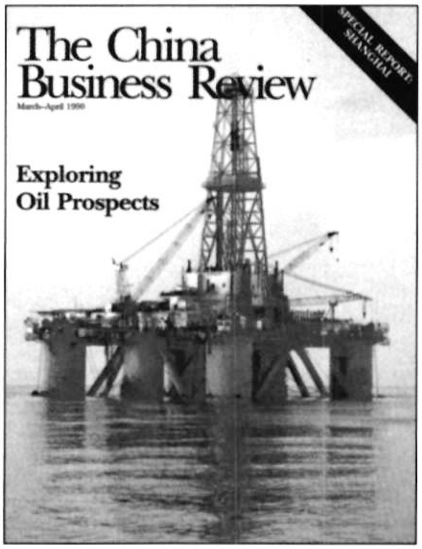


Cover: Foreign oil companies reach deep for potential profits.
*Photo courtesy of Lincoln Potter*

# The China Business Review

The magazine of the US–China Business Council

March–April 1990 Volume 17, Number 2



After two postponements, Shanghai Centre celebrated its soft opening March 1.




Douglas Paal of the National Security Council speaks at the Council's annual Forecast meeting.

**Departments**

摘要 

# Trends & Issues

## Hong Kong: Friend or Foe?

China's replacement of Xu Jiatun with the more conservative Vice Foreign Minister Zhou Nan as head of the New China News Agency—Beijing's unofficial diplomatic mission in Hong Kong—has increased unease in the colony, where distrust of the Chinese regime has grown significantly since it trampled pro-democracy demonstrations last summer.

Zhou's appointment is just the latest sign that the Chinese leadership's approach to Hong Kong has hardened, reflecting China's new view of the colony as a source of subversion to be guarded against, rather than a model to be emulated. Small, increasingly frequent disagreements and the failure of Hong Kong Governor Sir David Wilson or British Prime Minister Margaret Thatcher's advisor Sir Percy Cradock to get China to adopt a more conciliatory posture have further eroded Hong Kongers' confidence in the colony's future after it reverts to Chinese sovereignty in 1997.

Wilson traveled to Beijing in January for the first time since the crackdown to try and prevent a further deterioration of the relationship, most recently strained by Chinese reaction to a British proposal to provide passports to up to 225,000 Hong Kong Chinese by 1997. The Chinese, who denounced the proposal as a "gross violation" of past agreements, have continued their criticism even though domestic political pressure in Britain has delayed a vote on the legislation until at least Easter.

Foremost on Wilson's agenda was to calm Chinese fears of subversion and try to get them to agree to increased democratic participation in Hong Kong both prior to and after 1997. Not only did Wilson return home empty-handed, but the Basic Law Drafting Committee, a Beijing-dominated panel that is drawing up the final draft of the legislation that will govern Hong Kong after 1997, has increased Chinese control over the colony. It has proposed complicated voting procedures for bills emanating from the legislative branch, where a minority of the legislators will eventually be directly elected. This measure will further dilute the elected members' influence, compared to that of Beijing's hand-picked representatives in both the legislative and executive branches. The committee has also decided that only 15 percent of the legislators after 1997 will be able to hold foreign passports or have the right to reside abroad.

Hong Kong and British authorities have tried to calm the fears of Hong Kong's citizens by announcing grand schemes to improve employment prospects, but the key to Hong Kong's future lies in China. And as long as Beijing maintains a hard-line posture, Hong Kong's brain drain will continue. —PB

## A Bumpy Road

Despite measures taken by both the Chinese and US governments over the past few months to forestall further deterioration in relations, there has been little real improvement in the relationship.

In a symbolic move, the Chinese in January lifted martial law in Beijing, but left in effect the same prohibitions against expressions of dissent. To show that Washington regarded the largely cosmetic move as significant, the State Department lifted the advisory that had recommended against unnecessary travel to China, paving the way for increased US tourism to China. China also worked to improve its public image by agreeing to discuss resumption of the Fulbright Program of educational exchange, accepting a future Peace Corps contingent in Sichuan Province, and releasing more than 500 people arrested in connection with the Tiananmen demonstrations on Januaray 18.

The White House, claiming these moves vindicated the president's China strategy, successfully lobbied the Senate to defeat an override of the president's veto of the Pelosi Bill, which would have permitted Chinese students to legally extend their stay in the United States. Despite the president's victory, however, it was clear that Republican senators stuck with him out of party loyalty rather than support for his China policies, and within two weeks after the Pelosi vote they approved a package of China sanctions attached to the State Department Authorization Bill. The bill is expected to become law.

Congressional pressure is now on the president to prove that his China policy can obtain more significant results. But with a stinging State Department human rights report and little help so far from China—anti-American rhetoric has actually increased—the administration is trying to keep a low profile to prevent any further backlash, postponing the vote on resumption of a World Bank loan and denying a Chinese State-run company permission to acquire US technology (*see* p. 5).

As long as Congress views China as politically repressive and moving backward on economic reforms—in contrast to the political and economic liberalization currently sweeping through Eastern Europe and the Soviet Union—it will keep a close eye on the administration's China policy, effectively limiting the president's maneuverability. It also goes without saying that in areas in which congressional pressure has been key to progress—such as export controls liberalization and export financing—little movement should be expected. —PB

# China Gets Some Credit

The credit freeze imposed on China by government and multilateral lending institutions since its crackdown last June is beginning to thaw. The executive board of the World Bank, for example, voted in February to resume partial lending to China by approving a $30 million "humanitarian" earthquake relief loan. At the same time, however, the Bank postponed voting on a $60 million loan for agricultural development in Jiangxi Province. The postponement came at the request of the United States, which feared approval of the loan would invite a backlash from an already critical Congress. The Bank rescheduled the vote for the end of February, though the loan's fate—as well as the rest of the Bank's traditional sectoral loans—will be determined by the atmosphere on Capitol Hill.

The US Export-Import Bank (Eximbank) also broke the ice by approving two loans to China in February. One, a $9.75 million loan to the China National Offshore Oil Corp., will finance engineering services for a gas processing plant to be purchased from McDermott International Inc. The other is for $23.1 million to purchase US-made signaling and other equipment for the Shanghai subway.

The World Bank and Eximbank loans follow the extension of funds by West Germany and Spain in January. The new West German loan is a 100 percent grant for $1-3 million, and follows the release of a $230 million loan for the Shanghai subway project approved prior to June 4. The Spanish deal—$30.3 million in mixed credits originally approved in January 1989—will finance a new power plant in Guangdong. Canada, Australia, Finland, Denmark, and Sweden have also extended new credit to China.

Japan is expected to unfreeze the third round of its Organization for Economic Cooperation and Development (OECF) aid program following Shintaro Abe's visit to China in March. In the meantime, the Japanese government has already extended about $55 million in non-OECF funds to three Chinese projects.—PB

# Short Takes

## Falling Yuan?

Rumors are already rampant that China will again devalue the renminbi 10-15 percent, following the 21.2 percent devaluation in December, from 3.71/$1 to $4.71/$1. The move was an attempt to boost exports and reduce corruption and the budget deficit.

## CATIC Deal Won't Fly

President Bush has ordered the China National Aero-Technology Import/Export Corp. (CATIC) to sell its interest in Mamco Manufacturing Co., a Seattle-based producer of aircraft parts, on grounds that the sale is contrary to US national security interests. To allay foreign concern, the president told Congress that the action does not "change our open investment policy."

## NPC Preview

The National People's Congress is currently reviewing several pieces of legislation of benefit to foreign investors and may approve them at its late-March plenary session. The amendments to the 1979 Joint Venture Law, which would permit foreigners to serve as chairmen of joint ventures, are expected to pass without problem. Passage of the copyright law, which would establish a framework for protecting copyrights in all areas, is less certain. Although an amended law strengthening patent protection was originally expected to be submitted to the NPC for approval this spring, it will clearly not meet this deadline. A separate set of computer software regulations covering copyright protection is currently being reviewed by the State Council, and does not require NPC approval to become law.

## Restricting Study Abroad

The State Education Commission has issued new rules that toughen restrictions on Chinese students hoping to study abroad. University graduates must now work for five years in China and be deemed "politically reliable" by their work units before being permitted to apply for overseas study. Work units must also approve applicants wishing to register for the Test of English as a Foreign Language (TOEFL) examination, which is required by most foreign universities. Students wishing to waive the work requirement are required to pay the government $530–$1,275 for each year of university training received.

## Burgers for China

Little-known Fast Lane Burgers Restaurant of Arizona has secured the first burger franchise in China. With an investment of $2-3 million, Fast Lane took less than six months to negotiate the joint venture with Chinese partners the China Foundation and the Great Wall Restaurant. The restaurant, which will feature a 200-seat dining area filled with American sports decor and large-screen TVs, plans to open its first store in Beijing in May—right next to its chief competitor, Kentucky Fried Chicken.


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# China's Sinking Surplus

*Seeking new sources to meet the burgeoning demand for petroleum*

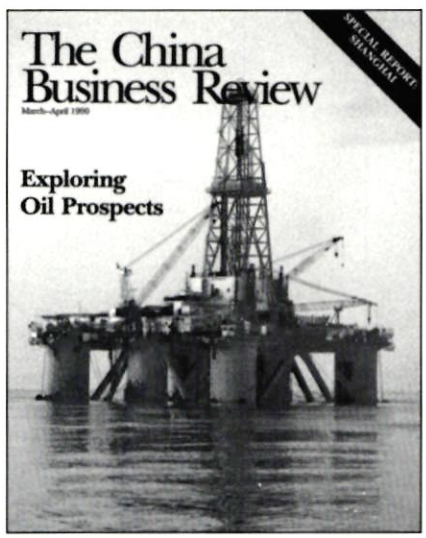
**Bruce Vernor**

In 1949, the new People's Republic of China was producing 2,400 barrels per day (bpd) of crude oil. Although the USSR aided China's petroleum industry until the 1960 rupture in relations, and Romania provided some limited assistance, China has essentially run its oil industry alone. Thus the Chinese were justifiably proud when by 1979 oil production topped 2 million bpd. A decade later, China has improved on that performance by nearly 40 percent, with an estimated 2.78 million bpd produced in 1989 (*see* table 1).

Continuing this record of progress is becoming increasingly difficult, however. While China's total petroleum resources are estimated to be huge—over 300 sedimentary basins onshore covering 4.5 million sq km and 170 potentially oil-bearing onshore structures have been identified by geological surveys—planners have been excessively optimistic about the extent of China's reserves to be discovered in the near term. Often-quoted figures for total continental petroleum resources are 469 billion barrels of oil and 1,059 trillion cubic feet of gas—estimates derived by multiplying the volumes of sediments by average oil and gas contents. The numbers represent estimates of the total resource base, discovered and undiscovered, and do not provide any assurance of discoveries, especially if exploration is insufficient.

### *Ambitious targets*

China's oil-production target for the year 2000 is 4 million bpd, which would likely permit continuation of limited crude exports and allow some expansion of product demand. Meeting the goal will require finding about 98.6 billion barrels of new reserves—or more than 8 billion barrels per year, according to the Ministry of Energy Resources (MOER). MOER's figure seems to estimate oil in place, however, rather than recoverable reserves, and it is possible that China could meet its goal with the more reasonable discovery level of about 21 billion barrels, or 2 billion barrels per year from 1991 to 2000. But it appears unlikely China can meet these targets, and 3.75 million bpd seems a more reasonable projection for the year 2000.

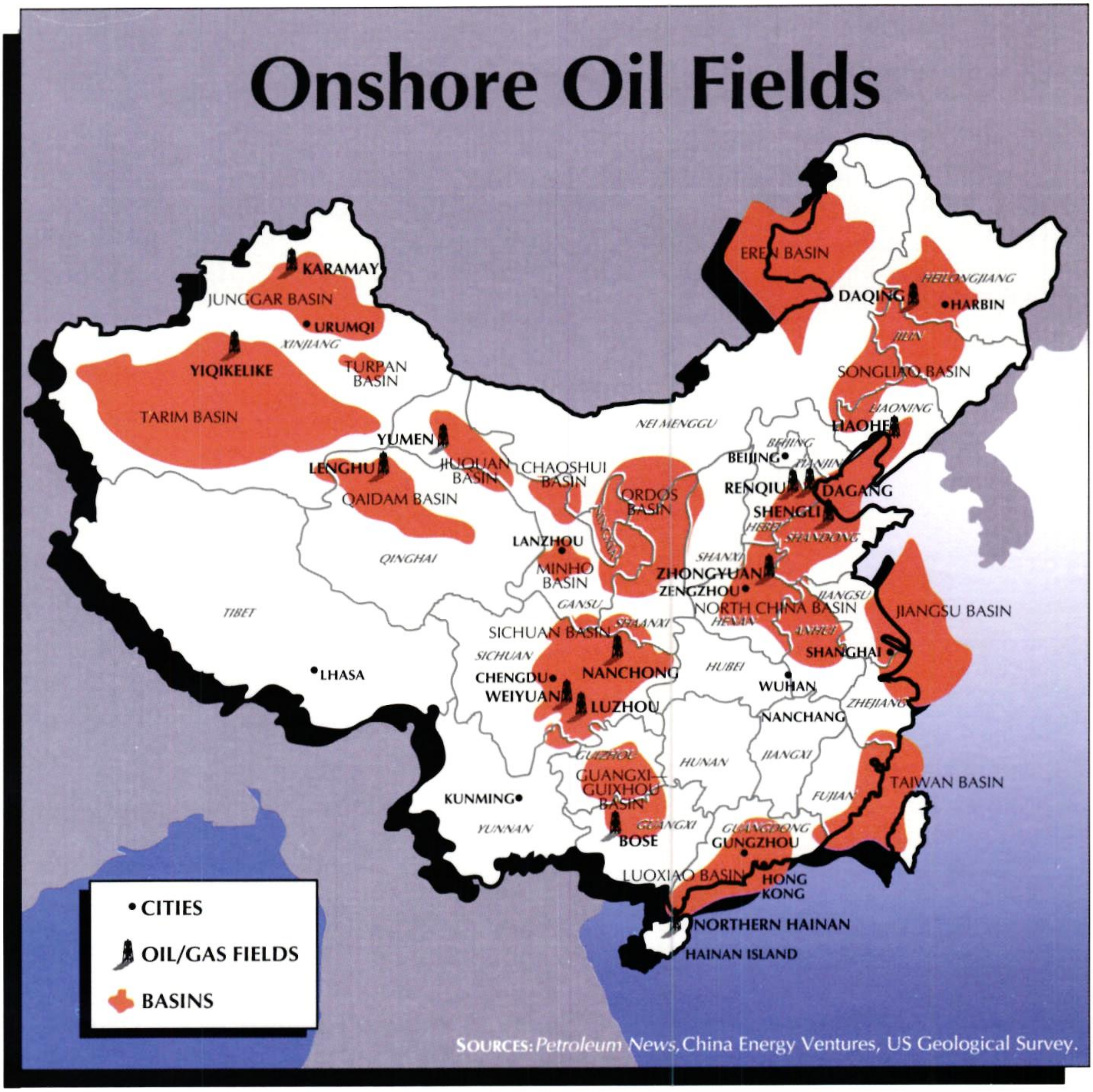



*Bruce Vernor is vice president and partner in China Energy Ventures Inc., a commercial consulting firm advising clients on doing business in China. He worked for 32 years as a petroleum engineer and manager for ARCO. His last seven years with ARCO were spent in Beijing, where he served as company representative and negotiator, and in South China, where he was vice president of ARCO China.*

China is betting on offshore efforts and reserves in the Northwest provinces of Xinjiang and Qinghai to provide part of the increase, with 200,000 bpd expected from Xinjiang and 400,000 bpd from offshore fields. China will probably be able to achieve only 115,000 bpd in 1995, however, compared to the 160,000 bpd estimated by the China National Offshore Oil Corp. (CNOOC). Unless much larger fields are discovered in the 1990-1997 period, 400,000 bpd in 2000 is almost impossible. As a consequence, exports are likely to be reduced, and domestic demand will be constrained as well. China's annual oil-export surplus has therefore been decreasing steadily, and some analysts believe China will become a net oil importer by the late 1990s or early 2000s.

China's targets for oil production probably cannot be reached at projected levels of exploration investment. Exactly how much capital will be needed is hard to estimate, as investment relates to undetermined "finding costs." If oil can be found at an investment as low as $5 per barrel, China would need $10 billion per year of investment—$2 billion more than the total budget of the China National Petroleum Corp. (CNPC), not all of which is earmarked for exploration.

Oil development programs for the 1990s place top priority on maintaining the output of North China's seven largest onshore oil fields—Daqing, Liaohe, Huabei, Shengli, Zhongyuan, Dagang, and Karamay—as well as exploration in the Northwest provinces. But these will not produce enough to reach output targets, and with capital shortages




Art by Fred Flerlage

growing more serious throughout the government, only foreign investors are likely to supply the money needed for exploration and development.

### *Receding reserves*

China launched its first concentrated effort to increase petroleum production in 1959-63, when the combination of the Soviet Union's withdrawal of aid, domestic economic crisis, and perceived military threats from India, Vietnam, and the Soviet Union added urgency to China's need for new energy sources. In response, in 1959 the ministries of Petroleum and Geology began exploring for oil on the Songliao Plain, which straddles Heilongjiang and Jilin provinces in China's Northeast. The field they found and developed was named Daqing ("big celebration"), and with the help of thousands of army personnel, Daqing started producing in 1960 and now supplies about 40 percent of China's annual oil production. The second-largest field, accounting for 25 percent of oil production, is Shengli, in the North China Basin, which opened in 1962. These were followed by a number of large fields, including Dagang, Liaohe, and Huabei in the Northeast, and Karamay in Xinjiang Province (*see* map).

By the early 1970s, China's domestic petroleum consumption was increasing rapidly, while planners also hoped to expand crude exports to boost revenues. Investment in new exploration and more efficient extraction technology had suffered during the Cultural Revolution years (1966-76), however, while operating fields were being exploited in ways that maximized short-term returns but may have reduced the fields' lifespans.

In the 1980s, problems became more acute, as rising demand put pressure on the Chinese government to increase investment. Foreign analysts forecast an annual 5 percent increase in China's domestic oil consumption throughout the 1990s, fueled by the burgeoning transportation sector. Current crude oil production growth has been running only 2-4 percent, however, and could reach zero growth in the 1995-2005 period without heavy investment (*see* table 2).

That investment is more readily available from foreign companies than from China, which simply lacks the requisite revenues. But, if current policies are continued, foreign participation will be largely confined to offshore drilling sites and to limited involvement in Northwest exploration. The producing fields onshore in China's Northeast may afford opportunities for equipment sales, but bureaucratic resistance to foreign involvement in these fields, which have traditionally been used as models of Chinese self-reliance, remains very strong and probably precludes foreign involvement in developing the Northwest oil fields in the near future.

### *Great expectations . . .*

Potential does exist, however, for greater foreign participation in offshore exploration in the South China and East China seas. At the time of the early negotiations and the first round of bidding, many companies had high hopes for large finds off China, in the largest unexplored offshore basin in the world. Undoubtedly, some believed they might find giant fields, with reserves above 1 billion barrels of recoverable oil. No large fields were found in the early negotiated ventures, however, nor in the tracts awarded in the first bidding round in 1982. To compound the disincentive of smaller finds, crude prices dropped dramatically in 1986. CNOOC is fond of stating that 150 exploration wells have been drilled, with about one-third producing oil or gas—but development of most of these finds would not be commercially viable. Nearly all major international oil companies participated in the early bidding, with only two, Gulf (now part of Chevron) and CONOCO, notable in their absence. In addition, several national oil companies and independents—companies specializing in one aspect of the oil business—have participated.

**Table 1**
**Oil Production**
**First Half 1989**

| Field | Production (barrels/day) |
|---|---|
| Daqing | 1,112,300 |
| Shengli | 656,400 |
| Liaohe | 255,600 |
| Zhongyuan | 140,000 |
| Xinjiang (Karamay, etc.) | 124,500 |
| Huabei | 108,300 |
| Dagang | 79,700 |
| Offshore | 18,200 |
| Other | 208,000 |
| TOTAL | 2,703,000 |

SOURCE: *China Economic Information*

Test yields on these discoveries vary widely, but no oil fields and only one natural-gas field (Yacheng 13-1) fall in the large or giant category (over 1 billion barrels of oil or 1 trillion cubic feet of gas). Rather, the field discoveries are small or mid-size structures with less than 200 million barrels of reserves. The economic return on development for most fields is marginal, at least as long as world oil prices remain in the current range of $15-20 per barrel. Crude oil prices have also dropped dramatically, compared to 1982.

While substantial offshore exploratory drilling has been done, only three offshore fields have been developed and are currently producing: Chengbei and BZ 28-1, developed by Japan National Oil Co. and a CNOOC subsidary in the Bohai Gulf, and Weizhou 10-3 in the Tonkin (Beibu) Gulf.

### *. . . disappointing results*

In 1987 14,200 bpd of crude was produced offshore—far less than was hoped for from the large fields companies had envisioned—of which 7,200 bpd came from the Chengbei oil field (Japan-China Oil Development Co.) and 7,000 bpd from the Wei 10-3 oil field, discovered by Total. BZ 28-1 came onstream in the Bohai Gulf in 1988, raising offshore crude oil production capacity to 21,600 bpd. Even so, offshore production averaged only a little over 18,000 bpd in the first nine months of 1989. Amid political turmoil, during which most expatriate personnel working in the oil industry temporarily left China, this is a respectable showing, but only a small step toward the 1992 goal of 100,000 bpd.

In contrast to its onshore counterparts, the bureaucracy charged with overseeing offshore development is considered fairly forward-thinking and amenable to foreign participation. In 1988, the Ministry of Petroleum was dissolved and replaced by the China National Petroleum Corp. (CNPC). CNPC and three State corporations in charge of offshore oil, coal, and nuclear energy now come under the aegis of an expanded MOER. The reorganization decentralized operational control over the oil industry, giving more authority to local oil field organizations, which should inject new vitality into oil development without a substantial change in personnel. CNOOC now controls all offshore operations except a portion of exploration, which the Ministry of Geology (MOG) oversees. MOG explores primarily in the East China Sea, although it did some exploration in the Pearl River Basin, while CNOOC was negotiating

**Table 2**
**Petroleum Production History and Forecast: 1987–2000**
**(millions of barrels/day)**

| Actual | | | Estimated | Projected | |
|---|---|---|---|---|---|
| 1987 | 1988 | 1989 | 1990 | 1995 | 2000 |
| 2.69 | 2.74 | 2.78 | 2.94 | 3.50* 3.30** | 4.00* 3.75 |

* CNPC estimate
** Estimate by Wu Kang, East-West Center

SOURCE: Bruce Vernor

with foreign companies for parts of the area.

A more efficient and progressive CNOOC is not enough for foreign companies, however. The concentration of foreign involvement offshore has been due largely to the sites' availability. By now, however, the bloom is off the rose, and few companies participated in the latest round of bidding on offshore sites in 1989. Before sinking more resources into China, they want to be assured of higher profit potential.

### *The North China Basin's promise*

The North China Basin, which underlies the entire Bohai Gulf and the onshore region near the mouth of the Huanghe River (Shengli Field) could become China's largest oil-producing region during the 1995-2005 period. The Bohai Oil Co., a subsidiary of CNOOC, has discovered one mid-size oil field and a natural gas/condensate field in the Liaodong Bay area in the northern Bohai Gulf (*see* table 3). The Chengbei oil field, with estimated recoverable reserves of 183 million barrels, is already in production. The BZ 28-1 field, with reserves estimated at 30 million barrels, began producing 8,600 bpd on July 1, 1989, while BZ 34-2/4 is slated to begin producing 9,600 bpd into floating storage in early 1990.

The Suizhong 36-1 oil field, also discovered by Bohai Oil Corp. in 1986, is estimated to go into production in 1992 and increase to a peak pilot production rate of 20,000 bpd. The oil has a low API gravity of 16-17 degrees, very high viscosity, and a low gas/oil ratio of 25 cubic feet (cu ft) per barrel. The field will therefore require artificial lift (submersible pumps) from the outset, adding to production costs. A development study financed by the US Trade and Development Program is in progress, and may recommend a new development plan.

The Bohai Corp. also discovered the Jinzhou 20-2 gas/condensate field, where estimated reserves include 706 billion cu ft of gas and 22 million barrels of condensate. It appears that 73 million barrels of crude is located in a separate reservoir from the gas/condensate reservoir and may not be developed. Plans call for developing the field to produce about 48 million cu ft per day of gas and 1,000 to 2,400 bpd of condensate, beginning at the end of 1991. The gas would be pipelined to shore for manufacture of fertilizer and other applications.

Several foreign companies are active in the South China Sea's Pearl River Basin, where a group of small and medium-size fields promise moderate profits over the coming decade. The earliest field brought into production provides a model for the sort of structures foreign companies are likely to adopt elsewhere in the Pearl River Basin: A consortium formed by Italy's Agip, Chevron, and Texaco called ACT finalized a contract in 1987 for development of the Huizhou 21-1 field, where a discovery well produced 13,000 bpd of oil in 1985 (*see* table 4). Development of a single platform and moored storage tanker is underway and scheduled to come onstream in August this year. The production target for the field is 23,000 bpd for 10 years, indicating recoverable reserves of 100 million barrels. The crude is light, at API 46 degrees, but contains 20-25 percent paraffin. There will be 10 producing wells, one gas well and four water-injection wells. Total development cost for the field is estimated to be about $235 million. ACT has issued a letter of intent to McDermott International Inc. and its Chinese partner for a $100 million contract to build the Huizhou 26-1 platform and pipelines, with a mid-1991 completion target. The discovery well in Huizhou 26-1 flowed a total of 26,000 bpd from seven zones, the highest test recorded off China's shore.

Three other promising sites under development are the Xijiang 24-3 oil field, discovered by Phillips/Pecten in April 1985, with estimated reserves of 45 million barrels; Lufeng 22-1, discovered by the Occidental Petroleum group, where an appraisal well tested 11,233 bpd, and Liuhua 11-1, discovered in 1987 by Amoco, with an estimated 1.8 billion barrels of oil in place. Only a small percentage of Liuhua's oil may be recoverable. The discovery is in 1,000 ft of water, requiring an extremely costly platform and horizontally deviated producing wells. Test yields are low (2,240 bpd) because of the low gravity of the crude oil (API 19-21 degrees) and the lack of associated gas. However, one horizontally

**Table 3**
**Offshore Production History and Forecast**
**(millions of barrels/year)**

| | Actual | | | | | Projected | | |
|---|---|---|---|---|---|---|---|---|
| **Field** | **1985** | **1986** | **1987** | **1988** | **1989** | **1990** | **1992** | **1995** |
| Chengbei | 0.2e | 1.2 | 2.6 | 2.7 | 2.5 | 2.5 | 2.5 | 2.5 |
| BZ 28-1 | | | | | 1.6 | 2.9 | 2.9 | 2.9 |
| BZ 34-2/4 | | | | | | 2.6 | 3.5 | 3.5 |
| No. 8 Oil Rig—Bohai** | | 0.3 | | | | | | |
| Weizhou 10-3 | | 1.2 | 2.6 | 2.1 | 2.0e | 1.8 | 1.6 | 1.2 |
| Suizhong 36-1 | | | | | | | 3.0 | 7.3 |
| Jinzhou 20-2 | | | | | | | | 0.7 |
| Huizhou 21-1 | | | | | | 2.8 | 8.4 | 8.4 |
| Huizhou 26-1 | | | | | | | 3.7e | 3.7e |
| Xijiang 24-3*** | | | | | | | 4.4e | 4.4e |
| Liuhua 11-1 | | | | | | | | 3.7e |
| Lufeng 22-1 | | | | | | 1.6e | 3.7e | 3.7e |
| TOTAL | 0.2e | 2.7 | 5.2 | 4.8 | 6.1 | 14.2 | 33.7<br>36.5* | 42.0<br>58.4* |

Notes: e - estimate by Bruce Vernor
* - CNOOC estimate
** - probably BZ temporary production
*** - may not be developed

SOURCE: Bruce Vernor

drilled completion averaged 7,000 bpd on a lengthy pumping test. But only a small percentage of Liuhua's oil may be recoverable, due to the low gravity and low quantities of gas.

There have been other discoveries in the Pearl River Basin, but the development potential of these fields is currently unknown. The Japex/Huanan discovery (Lufeng 13-2-1) tested at 2,900 bpd of crude. An earlier test of the Lufeng 13-1-1 also produced at substantial rates. Pearl River Operating Co.'s XJ 34-3-1 wildcat well flowed 37 degree API oil on two tests at a combined rate of 1,874 bpd in 1986. These and other discoveries may stimulate further exploration activity, but are not likely to be commercially developed given the current low price of oil.

### *Tonkin Gulf and the East China Sea*

In the Tonkin Gulf, between Guangdong and Vietnam, a marginal field called Weizhou 10-3 has been brought into trial production by France's Total Chine, after significant contract concessions by CNOOC. Total Chine withdrew from the project last August, saying that production of 3,000 bpd was too low to be profitable. Of two other Tonkin discoveries, one will be developed by CNOOC, with production beginning in August 1991 and projected to rise to 10,000 bpd, while the other may be too small for commercial development.

MOG has been exploring in the East China Sea since 1980, drilling 16 wells of which 13 produced oil or gas when tested. Several of the wells, however, are in areas claimed by other countries. Two offshore discoveries by MOG in the East China Sea have expanded the Pinghu natural-gas area, which is being considered as a gas source for Shanghai.

CNOOC announced in April 1989 that parts of the East China Sea under Chinese sovereignty will be open to foreign exploration, and several companies, including Exxon, British Petroleum, and Phillips, have expressed interest.

The only large discovery in the South China Sea lies in natural gas,

**Table 4**
**Offshore Contracts: Second-Round Awards**

| Group | Block | Area (square miles) | Type | Date |
|---|---|---|---|---|
| | | **Bid Awards** | | |
| Huanan/Japex | 16/06 (PRB) | 1,969 | exploration | 11/8/85 |
| Esso/Shell | 39/11 (PRB) | 1,497 | exploration | 11/15/85 |
| Phillips/Pecten | 15/22 (PRB) | 1,727 | exploration | 12/17/85 |
| ACT | 16/04 (PRB) | 1,230 | exploration | 12/21/85 |
| Cluff Oil | 24/16 (SYS) | 6,463 | exploration | 2/5/86 |
| Amoco | 16/34 (PRB) | 247 | exploration | 2/18/86 |
| Occidental | 27/24 (PRB) | 2,112 | exploration | 3/28/86 |
| BP | 25/02 (SYS) | 2,097 | seismic | 8/26/86 |
| | | **Bilateral Contracts** | | |
| Amoco | 29/04 (PRB) | 1,236 | exploration | 9/85 |
| Idemitsu | N/A (BBG) | 494 | exploration | 10/85 |
| Sun | 22/24 (BBG) | 900 | exploration | 10/85 |
| Amoco | 04/29 (PRB) | 2,483 | exploration | 9/16/86 |
| Occidental | 17/15 (PRB) | 135 | exploration | N/A |
| Huanan | 41/02 (PRB) | 502 | seismic | 9/28/86 |
| Sun | 09/36 (BBG) | N/A | exploration | 3/87 |
| BP | 05/08 (PRB) | N/A | exploration | 8/18/87 |
| Amoco | 06/15 (BHG) | 3,090 | exploration | 11/24/87 |
| Japex/Teikoku | 13/03 (BHG) | 571 | exploration | 12/87 |
| Statoil | 52/26 (SCS) | 1,444 | exploration | 1/20/88 |
| Pearl River | 15/31 (PRB) | 494 | exploration | 8/30/88 |
| Esso/Shell | 26/28 (PRB) | N/A | seismic | 9/26/88 |
| BP | 10/15 (BHG) | 1,091 | exploration | 2/1/89 |

NOTES: PRB - Pearl River Basin; SYS - South Yellow Sea; BBG - Beibu (Tonkin) Gulf; BHG - Bohai Gulf; SCS - South China Sea south of Hainan Island

SOURCE: Bruce Vernor

which is very difficult to sell in an area far from potential markets. The only way to transport gas by tanker is as liquefied natural gas (LNG) at very low temperatures. This is a very expensive process, and until recently, the primary market—Japan—appeared saturated (*see* box). Nevertheless, gas may be the best the area has to offer.

CNOOC believes that the Yacheng 13-1 field discovered by an ARCO-Santa Fe/CNOOC consortium off Hainan Island could become the center of a larger gas-producing area. Esso and Shell have discovered gas and condensate about 100 miles east of Hainan in the Wenchang 9-2 well, while Norway's Statoil has contracted for an area just east of the ARCO discovery. Pecten and British Petroleum have also reportedly expressed interest in exploring for natural gas.

Possibly in response to foreign pressures to be included in onshore oil-development efforts, the State Council opened potentially oil-bearing basins in 1985 to foreign participation in 11 southern provinces: Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hunan, Jiangsu, Jiangxi, Yunnan, Zhejiang, and Hainan. The China National Oil Development Corp. (CNODC) was created to negotiate and sign exploration contracts, using a production-sharing format derived from the offshore contracts, with all risk borne by the foreign partner. Although the seismic package was purchased by 23 companies, only an Australian group headed by CSR Orient Pty. Ltd. and a CNODC subsidiary on Hainan signed a contract. As crude prices began to drop, interest in the rest of the area all but disappeared, and CSR and CNODC terminated their contract after CSR decided that the oil was not economical to develop.

Prospects for onshore profits for foreign companies remain bleak, at least in South China. Many firms have set their sights on the potentially vast reserves in China's Northwest provinces but those remain tightly closed to foreign participation.

China's political turmoil has contributed somewhat to slowing the pace of foreign involvement in the petroleum sector, as has the reluctance of some Chinese bureaucracies to make onshore opportunities available to foreign companies. But the slump in international oil prices has had the most significant impact on foreign firms' willingness to invest. A reliable prospect for a return to firm crude oil prices above $18-20 per barrel over the coming decade should stimulate increased interest in China's oil industry.

To provide more exploration capital for its own companies, China needs to decontrol its internal oil prices. At today's State-determined price of $10 or less per barrel, CNPC loses money every year. Raising prices to match international levels would provide a positive incentive for more efficient use of petroleum products. Foreign analysts believe that price reform coupled with new initiatives for foreign investment will be crucial to the success of China's exploration programs. 完

# China's Northwest: The Final Oil Frontier

*Reserves may be vast—but it will cost billions to find out*

**Bruce Vernor and Richard E. Gillespie**

Most foreign oil companies hope that sooner or later China will permit foreign participation in exploring the vast sedimentary basins of China's western provinces. The only significant foreign investment to date has been in the Karamay oil field, expanded with the help of World Bank loans. But seismic surveys and geological studies have been conducted in the Tarim and Qaidam Basins, and the results have fueled high hopes.

So far, China has been determined to develop this area without foreign participation other than equipment sales and consulting help. China National Petroleum Corp. (CNPC) President Wang Tao has rejected proposals from oil company consortia including Exxon, Mobil, and British Petroleum for joint development and investment in the basins. Wang seems confident that the Tarim Basin can be developed independently, along the lines of the Daqing field. But the forbidding environment—enormous deserts and plateaus too high and dry for most animals and plants to survive—will make oil development costly, while the remote location of the western basins will require construction of a 2,240-mile pipeline to the eastern provinces, estimated to cost $6-8 billion. In addition, CNPC is considering construction of a 1,500-mile pipeline from Karamay to central China to carry the added volume of crude to be produced by the mid-1990s. With domestic oil prices at current levels, CNPC will not be able to fund this development alone. Thus, foreign oil companies are counting on the Chinese to allow foreign participation in development of oil reserves.

Four very large sedimentary basins in western China hold promise for future petroleum exploration and development: the Junggar, Tarim, and Turpan—which is as yet completely unexplored—in Xinjiang Province and the Qaidam basin in Qinghai Province. CNPC claims that the three basins in Xinjiang contain one-third of China's ultimate petroleum resources. A total of 11 oil fields and producing areas have been discovered in the three basins, with 5.8 billion barrels of light and heavy crudes in place, implying recoverable resources of 1.2-1.7 billion barrels (20-30 percent recovery factor). However, this figure includes the large and economically marginal reserves of heavy oil at Karamay, where recovery may average much lower than 20 percent. Natural gas resources in the three basins total about 1 trillion cubic feet. CNPC forecasts that by the year 2000, Xinjiang's recoverable oil reserves will total 14 billion barrels (including heavy oil)—compared to China's current total reserves of 22-25 billion barrels. Using a reserve/production ratio of 20.5—average for China—14 billion barrels would imply 175,000 barrels per day (bpd) production. At a more rapid depletion rate, such reserves could support the 400,000 bpd forecast by CNPC for the year 2000.

The earliest area to produce oil was the Karamay oil field in the Junggar basin, where a massive surface tar seep led to the discovery of an oil field in 1955. Commercial production started in the late 1950s. The field produced 110,000 bpd in 1986 and 109,600 bpd in 1987. Many peripheral structures have been discovered in the Junggar Basin, indicating that much of the basin could contain petroleum. The East Junggar oil field, which includes the Huoshaoshan field and a number of other producing structures, has been under development since 1987. The Xinjiang Petroleum Administration Bureau invested about ¥1 billion (about $270 million) to develop the area in 1988. Initial capacity is 20,000 bpd but is targeted to reach 80,000 bpd by 1990, nearly doubling the petroleum production of the Junggar Basin.

The only other production from the four western basins is at Kekyar (near Yecheng) in the far southwestern corner of the Tarim Basin. About 20 million tons (150 million barrels) of in-place crude oil resources and 700 billion cubic feet (cu ft) of natural gas have been discovered at the small field at Kekyar. A small (3,000 bpd) refinery and fertilizer plant have been built at Kekyar to serve the local market.

### *Tarim's potential*

The Tarim Basin, a wasteland area larger than France that contains the world's second-biggest sand desert, is by far the largest exploration target in western China. The Tarim presents formidable operational obstacles, with a yearly temperature range of -20-126 degrees Fahrenheit and dunes big enough to bury a drilling rig in a sandstorm. There are no roads across the desert, parts of which lie 250 miles from the main supply base at Korla.

The US Geophysical Service Co. signed a contract in 1982 to conduct seismic surveys in the Tarim Basin across a broad grid. About 100 exploration wells have been drilled outside the desert zone, with the first discovery, the Shacan-2, in 1984, yielding 6,300 bpd of crude oil and 70 million cu ft per day of natural gas. Several more discoveries have since been made with wells of 16,000-18,000 ft, especially in the Luntai area, which is accessible by rail. The massive Tabei uplift in the northern Tarim yielded oil in November 1988 from the Lunnan-2 well, with 11 productive oil zones totaling 200 feet in thickness.

The Manxiyi-1 wildcat well, drilled by CNPC in early 1988, represented China's first effort at desert drilling. The well was scheduled to be completed to a target depth of 18,000 ft by August 1988. American desert drilling experts are assisting the drilling team.

These discoveries brought the petroleum potential of the Tarim Basin to the attention of China's top political leaders. State Councillor Zou Jiahua in January 1989 announced the establishment of a high-level coordinating group for exploration and development of the petroleum resources of the Tarim Basin. The group will include leading members of the State Planning Commission, the Ministry of Energy, and the CNPC. The State Council has also decided to invest ¥1.5 billion ($318 million) in accelerated exploration of the Tarim in 1989-90, though political turmoil and economic retrenchment could impinge on the plan.

In the 1960s the Qaidam Basin, a massive salt desert at an elevation of 10,000 feet and nearly surrounded by high mountains, began producing small volumes of petroleum, which was trucked to Tibet for military use. Development of the Gaskol (Gasikuli) field in the Qaidam Basin began in 1987. A total of 140 development wells are planned, with capacity to reach 23,000 bpd in 1990. The crude oil produced at the field will be shipped via a 429 km pipeline to a small refinery at Golmud. Chinese sources project the potential in-place petroleum resources of the Qaidam Basin at 14 billion barrels, implying recoverable resources of 4 billion barrels. However, this very optimistic estimate is almost certainly an extrapolation from the volume of the basin.

### *Treasures—and trials—for foreign companies*

Although foreign companies continue to express keen interest in developing China's western basins, they recognize the high costs and risks of exploration. Desert drilling in the Tarim Basin, for example, costs about $825 per foot, or $16 million for a 20,000-ft well—almost as much as an offshore well in the South China Sea. According to Chinese estimates, oil discoveries in the Tarim Basin must be sufficient to support at least 400,000 bpd of production capacity to make development economically feasible, but this must be considered a minimum figure. Given the continuing volatility of world oil prices, western China could need 1 million bpd of production capacity to make its crude oil competitive on the world market.

These obstacles aside, however, both Chinese and foreign interest in exploration of the western basins is very high. The Chinese view the western basins as a source of a large volume of oil for China. The foreign oil companies see them as the largest unexplored basin in the world with good exploration potential. Colossal discoveries could make development and production very profitable, even with the high investment cost for a 2,240 mile pipeline. British Petroleum has reportedly formed a consortium, including Nippon Oil, Mitsubishi Corp., C. Itoh & Co. Inc., Broken Hill Proprietary, and Petrobras, that has petitioned the Chinese government to open development in Xinjiang to foreign participation. Other companies have also expressed their desire to participate in the development plans. But oil companies are betting exploration and development in western China will take 10-15 years, including pipeline construction, from the signing of the first contract. To be willing to risk hundreds of millions of dollars, companies must have oil price forecasts showing stable or rising prices by 2000-2005, when the venture could come onstream.

China has important incentives to enter joint exploration contracts with foreign partners—chief among them capital. China also needs the advanced technology—particularly desert drilling technology—foreign companies have to offer. Solo development of the western basins could add 10 years to the amount of time needed before oil flows from the Northwest, time China can ill afford.

The current Chinese exploration program in the Tarim Basin is an encouraging sign that the Tarim and other western basins may soon be opened to foreign participation. But leaders may resist foreign participation in western oil development for internal political reasons. Xinjiang and Qinghai provinces remain among the least developed areas of China, with poor transportation and energy infrastructures. Large Moslem populations may be less subject to central government control than the majority Han of central China, and leaders may fear the influence of a large flow of expatriate personnel that would be more difficult to isolate than foreigners working on offshore rigs. 完

*The authors wish to thank Dr. Kim Woodard for use of original research on the western basins.*

# Weathering the Dry Spell

## *US oil-industry suppliers hope for better prospects—and find some downstream*

**Richard E. Gillespie**

Participation in China's oil development continues to excite interest among foreign businesses, despite disappointing results in exploration efforts to date and a general depression of the business environment following the 1989 crackdown at Tiananmen. Foreign oil companies have long sought to participate in developing China's oil fields, while China has traditionally resisted joint investment projects, preferring to buy US equipment and services rather than share future profits from oil fields (*see The CBR*, January-February 1985).

Chinese policymakers began to realize in the early 1980s, however, that China's oil needs could not be met without levels of investment and technology only foreign companies could supply, and the Ministry of Petroleum Industry (MOPI) shifted from resisting foreign investment in offshore oil development to soliciting it. Thus the early 1980s saw 37 offshore contracts signed with 45 oil companies from 12 countries. Over $2 billion was invested in some 200 offshore wildcat wells, three of which have begun development.

Foreign oil companies participated in the initial series of offshore projects in the early 1980s with great optimism, accepting sometimes onerous contract terms to get a foot in the door. However, with only a few sites yielding oil to date—most of them small to medium-size fields with only marginal profitability—enthusiasm waned. Sensing foreign disillusionment, a reorganized China National Offshore Oil Corp. (CNOOC), the entity in charge of offshore development, announced significantly more attractive terms in its third and latest round of bidding for offshore drilling sites in the South China Sea, undertaken in early 1989 (*see* p. 24). A few fairly large discoveries in the South China Sea's Pearl River Basin—most recently, Amoco Corp.'s huge Liuhua field—have also rekindled foreign interest. Foreign companies are cautious but not pessimistic, recalling that 51 exploratory wells—many more than have been dug offshore in China so far—were drilled in the North Sea before commercially exploitable offshore oil was found there.

In 1986, China also ended restrictions on foreign investment in onshore sites, but foreign companies have virtually ignored the invitation to invest in onshore sites in 10 southern provinces. Foreign companies have pressed a number of proposals to participate in the development of China's western oil fields, but the comparatively conservative onshore oil bureaucracy has not been enthusiastic about cooperating with foreign companies.

*Richard E. Gillespie retired in late 1989 as vice president of the US-China Business Council, where for 10 years he followed China's energy sector. The author wishes to thank James F. Houle, president of International Development Planners in San Francisco, for information on petrochemicals.*

While waiting for investment in oil fields to pay off, foreign companies have been making lucrative equipment sales both onshore and offshore, winning engineering contracts for refineries and petrochemical plants, and providing consulting and other services to this large and growing sector.

### *Strong US equipment sales*

Consultants and equipment suppliers have been well positioned to get business from oil fields and refineries where Chinese planners want to maximize efficiency with minimal investment, with engineering firms among the most successful. Since 1979, $3.4 billion in oil field imports from 13 countries have included about $1.4 billion of US equipment (*see* table 5).

China has sought advanced foreign technology to solve particular problems, but oil-field planners generally try to make selected purchases designed to upgrade their own technological capability. An early 1980s licensing deal for Baker Hughes Inc. drill-bit technology, for example, has made China virtually self-sufficient in this crucial area. Foreign technology has also significantly enhanced China's exploration and drilling operations, with imported 3-D seismic technology improving drilling efficiency and output without increasing the number of oil rigs. Foreign logging and coring technology has enhanced deep-drilling operations, and China is now reportedly shopping for horizontal drilling technology for its deeper offshore wells.

Chinese planners generally prefer US oil equipment, though China still imports oil-field equipment from Eastern Europe, and Japanese, West German, and Canadian suppliers have recently become significant competitors. A 1987 US-China Business Council study that reported that the Bohai Development Corp. hopes to purchase 67 percent of $290 million in imports for its Suizhong 36-1 field from the United States suggests the strong position of US companies in China's oil industry. Desired US oil equipment included submersible pumps, mainframe computers and programmable controllers, bit stabilizers, drilling mud, wellhead structures, and steam generation equipment for heavy-oil recovery. In the northwest provinces, the Karamay oil field in western Xinjiang Province in 1987-89 imported a rig from a Dresser Industries Inc. joint venture as well as data-processing hardware from Prime Computer Inc.

China's imports of foreign petroleum technology, services, and equipment decreased significantly in 1987 (*see* box, below), after Chinese oil fields ended a buying spree and concentrated on absorbing their new inventory; China's frenetic import program had brought in some equipment ill-suited to local conditions. A number of foreign drilling rigs, for example, proved too heavy for China's marsh, beach, and shallow-water areas. Though still waiting for sales to recover to pre-1987 levels, foreign suppliers are optimistic.

As China attempts to upgrade its manufacturing capability, officials will be seeking advanced foreign technology and equipment to help maintain production levels at the mature oil fields in northeastern China. Much of the $2 billion in foreign imports bought by Daqing field, for example, have consisted of enhanced oil-recovery technology, much of it from the United States. Application of intensive infill drilling and water-injection techniques at Daqing has required installation of hundreds of imported electric submersible pumps, as well as other equipment.

**Table 5**
**Drilling and Oilfield Equipment US Exports to China, 1979–88**
**($ millions, f.a.s)**

| | |
|---|---|
| 1979 | $208.3 |
| 1980 | $ 79.7 |
| 1981 | $ 45.3 |
| 1982 | $ 56.4 |
| 1983 | $ 73.8 |
| 1984 | $131.9 |
| 1985 | $372.6 |
| 1986 | $149.1 |
| 1987 | $ 71.9 |
| 1988 | $ 92.2 |
| **Monthly Exports, 1989** | |
| January | $ 1.2 |
| February | $ 8.2 |
| March | $15.8 |
| April | $10.6 |
| May | $12.2 |
| June | $18.4 |
| July | $12.6 |
| August | $22.7 |
| September | $25.0 |
| October | $15.4 |

SOURCE: US Department of Commerce, Bureau of Economic Analysis

Shengli oil field, China's second-largest field complex, plagued with serious sand-control problems, has imported foreign equipment to treat the sand as well as foreign geophysical technology and equipment. Imported "huff and puff" steam stimulation technology is now in operation at Shengli's Shanjiase heavy oil reservoir, as well as in the Liaohe oil field.

Oil fields are not the only potential markets for US equipment and technology. Downstream industries such as refining and petrochemicals production have also made considerable purchases from abroad.

### *Growth in refining and petrochemicals*

China's production of plastics, synthetic fibers, and elastomers grew dramatically in the 1980s, and petrochemicals are consuming a greater portion of China's oil barrel. Beijing also faces a skyrocketing demand for naptha, stemming from the increased use of ethylene and other basic petrochemical and fertilizer feedstocks, while demand for diesel and other distillates is also rising.

The total production of petrochemical products has grown 16 percent yearly since 1984 and is planned to reach 5.62 million tonnes in 1990, but China still produces only 64 percent of its own petrochemicals. With imports (excluding chemical fertilizers) costing up to $1 billion annually, construction of new facilities has become a priority. The Seventh Five-Year Plan (FYP, 1986-90) calls for foreign help in tripling petrochemical production capacity and increasing production of plastic resins and ethylene by 250 percent. Rapid growth in fertilizer application has also required imports of $1 billion worth of chemical fertilizer each year, together with substantial new construction of ammonia and urea plants (*see The CBR*, September-October 1989, p. 46).

China has ... ed insufficient ... an operation ... ensive by the ... in Chinese ... nstream pe- ... es 1.6-1.7 ... (bpd) of ... controlled ... trochemi- ... he refin- ... dstock to ... plexes. ... of re- ... ls, and ... billion ... d ex- ... )-500 ... ology ... plic- ... on- ... es, ... petro- ... several key prod- ... Competition among Japanese, European, and US companies for these projects is strong.



Ambitious plans for constructing new primary processing facilities along the coast (Zhanjiang, Mawan, and Fujian) have been shelved, however, because of the modest pace of offshore oil discoveries, depressed international crude oil prices, and lack of hard and soft capital. Emphasis instead has been on modifying and upgrading existing oil refineries by adding secondary processing capacity and improving efficiency. Refinery output is also being increased by fuel conversion (oil to coal) together with secondary processing of residuals freed up by fuel switching.

Upgrading existing refineries has proved expensive. China needs foreign "hydrocracking technology," which upgrades oil products by breaking down heavier hydrocarbons under pressure. To date, China has not installed sufficient foreign technology for refining very heavy oil, forcing SINOPEC to negotiate crude-oil processing contracts with the Singapore refineries of oil companies such as Shell Corp., Mobil Corp., and British Petroleum to meet export requirements. Foreign oil companies—which have excess capacity at Singapore refining facilities—are pushing China to save money by contracting out more of its refining overseas, though China continues to cling to ambitions to become self-sufficient.

China's interest in foreign petrochemical technology is now focused on production of chemicals such as ethylene, polypropylene, styrene, and polystyrene, with Monsanto Corp., Dupont, and Union Carbide among the companies providing specialized technology to the sector.

In refining and petrochemicals, US manufacturers have been successful in marketing equipment for hydrocracker technology (including control systems, valves for refineries, and gas turbines for co-generation facilities that supply refineries) and also equipment for ethylene and ammonia-urea plants.

# A Better Year for 'Trusted Friends'

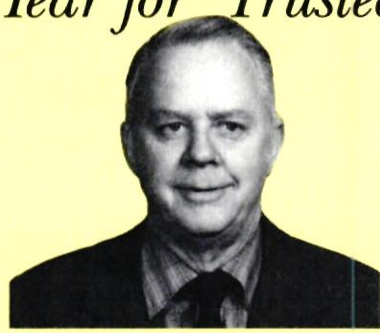
*Editor's note: LTV Energy Products Co. (LTVEP), a subsidiary of Continental Emsco, began negotiating contracts for drilling machinery with the Ministry of Petroleum in 1977 and opened a liaison office in China in 1982. To compensate for the decline in drilling machinery contracts during the past three years, the company increasingly represents other US oilfield manufacturers.*

*R.V. Atkinson, LTVEP area sales manager, spoke with Associate Editor Anne Stevenson-Yang about equipment sales to China's oilfields.*

**CBR:** *Is there a trend toward decentralizing oilfield purchasing authority?*

**ATKINSON:** A few contracts have been signed directly with endusers, but there is not a noticeable tendency to decentralize purchasing for the oilfields. Most LTVEP contracts are with MACHIMPEX [China National Machinery Import and Export Corp.], and we also work with INSTRIMPEX, TECHIMPORT, and other official foreign trade organizations.

**CBR:** *To what do you attribute the slump in US equipment sales since 1986? Do you expect sales to pick up again?*



**ATKINSON:** Limited foreign exchange for imports is the main reason, but technology transfers and the increasing availability of local products have contributed too. Good years for oilfield equipment seem to recur about every third year, and 1990 is due to be one. LTVEP remains optimistic, and we have a backlog of start-up work on 1989 sales while CNPC (China National Petroleum Corp.) is establishing priorities for 1990. Machinery imports for the energy-related industries, including petroleum exploration and production, are expected to remain active.

**CBR:** *What are the long-term prospects for equipment sales to western China?*

**ATKINSON:** Promising, as there is considerable activity to determine reserves in western China. Existing equipment from other oilfields is being utilized at this time, but CNPC may soon specify what drilling, transportation, pipeline, and other equipment will be needed to meet the requirements for the Tarim Basin and elsewhere in western China. Another two years should indicate the extent of those reserves and whether foreign companies will be invited to participate.

**CBR:** *In the past, US companies have been favored equipment suppliers for China's oilfields. Is that still the case?*

**ATKINSON:** Clearly the majority of imported oilfield machinery to China is from US sources, which have earned a reputation for reliability and for meeting after-sales commitments. Most enjoy "trusted friend" status, after having spent a few years in China.

CNPC advanced a great deal in oilfield technology during the 1980s, and the future will be equally impressive. Foreign exchange for imports will continue to be limited, but there will still be opportunities for dedicated service and equipment companies.

***Seeking scarce financing***

Faced with competition from countries with strong concessional financing programs, such as Canada and Japan, US oil companies have been willing to provide development capital to China in return for a percentage of future oil-field production. Although China accepts foreign investment in offshore fields, the onshore oil bureaucracy has so far preferred to develop western basins itself, with multilateral and foreign-government soft loans.

World Bank loans have financed purchases of foreign technology and equipment in the past, with the Bank providing $160 million of the total $675 million cost of developing the new Gaotaozi oil field at Daqing. The bank also extended $500 million to Zhongyuan to help cover the costs of 3-D seismic surveys, reservoir engineering, 200 production and injection wells, construction of a natural gas liquids plant, training and safety facilities, laboratories, and a computer center. A $100 million World Bank loan is also being disbursed for wildcat and appraisal wells, advanced seismic work, and a pilot project for heavy oil recovery at Xinjiang's Karamay field.

US consultants and equipment-supply companies have won important World Bank-funded contracts, while foreign-government concessional loans, especially from Japan's Overseas Economic Cooperation Fund (OECF), have also yielded sales for US companies, particularly in cases when Japanese manufacturers have been unable to provide equipment to the proper specifications.

Concessional government financing dried up after the political unrest of 1989, exacerbating domestic funding problems. Some loans are trickling back, however. The US Export-Import Bank (Eximbank), for example, in February made a $9.75 million loan to CNOOC at 8.3 percent to finance engineering for a Bohai Gulf gas-processing plant. Overseas commercial loans may soon also become available, though at higher rates than in the past. Thus, although less money will be available to the petroleum sector, US companies—which have suffered from a lack of strong government financing—may find it easier in the near future to compete against Japanese and other suppliers who were formerly backed by government loan programs.

Short-term prospects for US business in the petroleum sector are not bright, given funding shortages and a reversion to more conservative, isolationist thinking. China's onshore oil bureaucracy has proven intransigent in its opposition to foreign involvement in oil development, rebuffing both investors and equipment vendors. China National Petroleum Corp. (CNPC) President Wang Tao has recently asserted that China's current level of technology is adequate for onshore development, leading some companies to believe he will be reluctant to respond to foreign interest in onshore sites.

Reconciled to developing offshore fields of limited size, US oil companies are pursuing risk-avoidance strategies: They are demanding more operational autonomy, access to shallow-water areas with better-quality oil, the freedom to acquire adjacent tracts as needed, and more favorable royalty and tax terms. Oil companies also want the freedom to withdraw from projects that turn out not to be commercially feasible.

Deeper economic reforms, particularly decontrol of domestic oil prices, must accompany new investment for China's programs to achieve success. The petroleum bureaucracy, after weathering the purge of reformers that followed the political unrest of spring 1989, has emerged more conservative than before. Officials acknowledge that they are not about to challenge longstanding government policies of keeping domestic oil prices low to subsidize agriculture and other priority sectors. It may take a change in the oil bureaucracy's top leadership to alter this stance.

Despite the difficulties associated with ongoing economic retrenchment, China's petroleum market remains too important for US business to ignore. Remembering China's abrupt about-face on offshore development in the early 1980s, many US businesspeople are convinced that the oil bureaucracy will again turn to the West. Thus, US oil companies, manufacturers, and engineers are prepared to bide their time until China's political and economic situation sees a change for the better. 完

# Taxing the Oil Industry

*China makes progress toward an equitable code*

**Joyce Peck and Bruce Clarke**

In the late 1970s and early 1980s, international enthusiasm for China's offshore oil prospects far outweighed the petroleum industry's concern over China's lack of detailed tax legislation. Foreign oil companies viewed China as the last great frontier for offshore oil exploration, and Chinese officials shared the optimism, while recognizing they need to attract foreign funds and technology in order to tap offshore petroleum.

Once exploration contracts were signed, oil companies gradually turned their attention to China's emerging tax regime. In recent years, faced with disappointing results off the China coast and a world oil slump, companies have focused even more on tax issues. Fortunately, unlike many developing countries, China recognizes that its tax regime is in its infancy and changes need to be made to encourage foreign investment in petroleum exploration, as well as other areas.

In the early years of foreign investment, problems arose when China's loosely written tax laws were implemented by inexperienced tax authorities. To complicate matters, local officials have historically been fiercely independent of central control and wished to remain that way, which resulted in a lack of coordination among tax bureaus and inconsistent interpretation and application of tax laws. These problems were of particular concern to oil companies because their high up-front costs and long payback periods require favorable tax treatment to ensure eventual profitability. Initially, oil companies had the following concerns:

• Tax administration: Who should file? Where? Should expenses be reported on a consolidated basis, and if so, how?

• Tax deductibility: Can companies deduct precontract exploration and other costs? And are actual expenses, rather than the contractual amount, tax deductible?

Early tax problems have been greatly alleviated by nearly 10 years of experience and improved communications, along with the willingness of the Beijing Offshore Oil Tax Bureau (OTB) to assume a stronger leadership role. But stumbling blocks remain. As oil companies begin commercial production and move onshore, new tax issues must be addressed. The current political and economic climate creates uncertainties about the ability of tax authorities to respond appropriately, since Chinese officials may not be inclined to make major decisions, which are considered risky as long as the leadership remains unstable.

*Chinese officials have improved their understanding of international tax and business practices at a rate nothing short of miraculous.*

### *What is taxable?*

Generally speaking, the China-sourced profits of all foreign enterprises that have an "establishment" in China are subject to the 1982 Foreign Enterprise Income Tax Law (FEIT). According to the regulations, an "office site or business agent established in China to engage in production or business operations" constitutes an establishment and would include contracted exploration projects. The Double Tax Agreement (DTA) between the United States and China which came into force on January 1, 1987—is more precise, defining a "permanent establishment" to include a "mine, an oil or gas well, or other place of extraction of natural resources."

Chinese tax authorities have gone a step further in their stringent interpretation of what constitutes an establishment for the oil industry. Most tax bureaus still comply with a special ruling issued in 1983 (before the US-China DTA became effective), which provided that all foreign companies, including subcontractors, involved in exploring for oil and gas and providing related services within China territorial waters and continental shelf would be considered taxable units with establishments in China. Simply put, for companies in the China offshore or onshore oil business, taxes are levied from the start. Individuals working for petroleum-related enterprises are also taxed from the day they enter China. In contrast, most countries that have tax treaties with the United States allow subcontractors and individuals tax holidays as long as they meet specific treaty requirements.

Oil companies argue that China is not properly applying the US and other DTAs to temporarily China-based employees of companies and short-term contractors that do not have establishments in China. If specific provisions of the DTAs are met, these individuals and subcontractors should be tax-exempt. How-

*The authors work for Price Waterhouse China. Joyce Peck, director of China Services, spent 1984-89 working in Hong Kong and is now based in Raleigh, NC. Bruce Clarke is director of taxation and is based in Hong Kong.*

ever, with few exceptions, Chinese tax authorities have argued that employees' and subcontractors' costs should be taxed, as they are ultimately paid by an employer or client with an establishment located in China.

The State Tax Bureau (STB), which reports directly to the State Council, is China's ultimate tax authority. The OTB, a separate bureau under the STB with its central office located in Beijing, is responsible for the offshore oil and gas industry and has local bureaus in Guangzhou, Zhanjiang, Tianjin, and Shanghai. Although the STB has jurisdiction over onshore petroleum, the OTB also exerts a degree of informal control.

### *Defining gray areas*

Foreign participation in China's offshore oil industry and China's foreign enterprise tax legislation both emerged in the early 1980s. FEIT and its regulations, enacted in 1982 to accommodate the opening of foreign investment in China, contain several references to petroleum exploitation, none particularly detailed. Two of the most significant regulations are article 22, which addresses the deductibility of expenses incurred during the exploration phase, and article 18, covering the treatment of development expenditures. Other specific references to offshore oil in the regulations include article 16, concerning calculation of depreciation; article 24, on calculation of taxable income; and article 26, a definition of when income is received.

In subsequent years, China has had to issue many special tax rulings to cover areas omitted in the original FEIT regulations. For example, current tax laws do not address the deductibility of expenses incurred prior to the effective date of the petroleum contracts. To clarify the treatment of these expenditures, a general ruling was issued in 1985 allowing deduction of precontract costs considered reasonable and pertinent to the contract area. These precontract costs were incurred primarily from 1979-83 and relate mainly to the costs of seismic surveys and subsequent work performed in evaluating survey data, as well as negotiations and other preparatory efforts.

Oil companies maintain that any costs necessary to conduct business in China should be considered reasonable and pertinent. In the past, China has indicated a willingness to accept the costs of seismic surveys and subsequent data analysis but has shown concern over the magnitude of expenditures related to preparatory efforts and negotiations.

### *Learning tools*

Since 1979, when China embarked on its policy of cooperating with foreign companies to develop offshore petroleum, Chinese officials have improved their understanding

## *A Slow Start in Natural Gas*

Natural gas discoveries in China, as elsewhere, have been made accidentally in the process of exploring for oil. The prospect of developing gas finds has failed to stir much excitement among foreign companies, which rate China's natural-gas finds no better than those of other Asian countries, and China's business conditions present more difficulties. The potential uses for gas in China are also more limited, as the transportation sector will remain dependent on oil for the forseeable future. Demand for natural gas in China is expected to develop more slowly than in Latin America, the Middle East, and Europe.

Only ARCO has responded to China's interest in developing some of the more promising offshore sites. Together with the China National Offshore Oil Corp. (CNOOC), ARCO/Santa Fe is developing China's biggest natural gas field, Yacheng (YA 13-1) south of Hainan Island, which has reserves of 3 trillion cubic feet (*see The CBR*, January-February 1989, p. 20). The YA 13-1-6 appraisal well has flowed about 40 million cu ft per day (MMcf/d) of gas and 590 bpd of condensate. China is involved in talks to solicit investment by the Japanese trading company Nissho Iwai in a major liquefied natural gas (LNG) complex on Hainan Island. Nissho Iwai is considering conversion of about half of the available natural gas into 1 million tonnes per year of LNG for export to Japan. Additional gas would be used in local projects on Hainan. Estimated to cost $400 million just for the offshore field development and pipeline, with the LNG plant costing another $400 million, the project is scheduled to begin producing LNG in early 1993.

The East China Sea—near areas of high fuel demand such as Shanghai and the lower Yangtze Basin—has also yielded discoveries of commercially exploitable natural gas sites at Huangyan, Pinghu, and Yuquan. The Ministry of Geology's Shanghai Ocean-Geological Survey Bureau sank three high-yield wells in the East China Sea in 1989, and one has already flowed 2 MMcf/d of gas and 643 bpd of condensate. Chinese officials cite the Huangan success as proof that the Huangyan, Pinghu, and Yuquan structures can be developed into a "golden triangle" of gas exploitation. US engineering companies have shown interest in the East China Basin, with Bechtel Group Inc. completing a feasibility study funded by the US Trade and Development Program in mid-1989. While CNOOC has announced that foreign exploration will be allowed in East China areas where China's sovereignty is uncontested, there is no indication when this will occur. Foreign companies are also watching the Bohai Oil Co.'s exploration of another promising field in the Bohai Gulf.

The major onshore natural gas basins—one of China's development priorities—have not generated much business for foreign companies so far. Roughly one-half of the gas China produces comes from deeply buried reservoirs in Sichuan, where more than 100 rigs are currently involved in deep-drilling operations. China has developed its own technology for extraction, however, and has sought foreign help only in problem areas such as preventing explosions during drilling. Consulting work by Bechtel in Sichuan revealed little opportunity for investment there.

—Richard E. Gillespie

of international tax and business practices at a rate nothing short of miraculous. As recently as 1984, for example, after sitting through a US tax attorney's detailed lecture on corporate restructuring, a shy local tax official stood up and asked, "Now, exactly what is a corporation?" In 1988, that same tax official asked a visiting lawyer for more details on the IRS's position on transfer pricing.

How have such strides been made in less than a decade? Two reasons: the Chinese have been willing to listen, learn, and make necessary changes, and foreign companies have been patient and willing to teach.

The Chinese tax authorities have been quick to take advantage of a broad range of learning tools, including training of Chinese staff in international practices by legal and accounting firms, presentations by tax experts on draft legislation, and training stints overseas for Chinese tax and audit staff. Tax bureau leaders have traveled extensively to exchange ideas and negotiate numerous treaties with tax authorities in other countries. All in all, the Chinese have made a tremendous effort to better understand the reasons other countries select certain tax regimes.

### *Fearing a face-off*

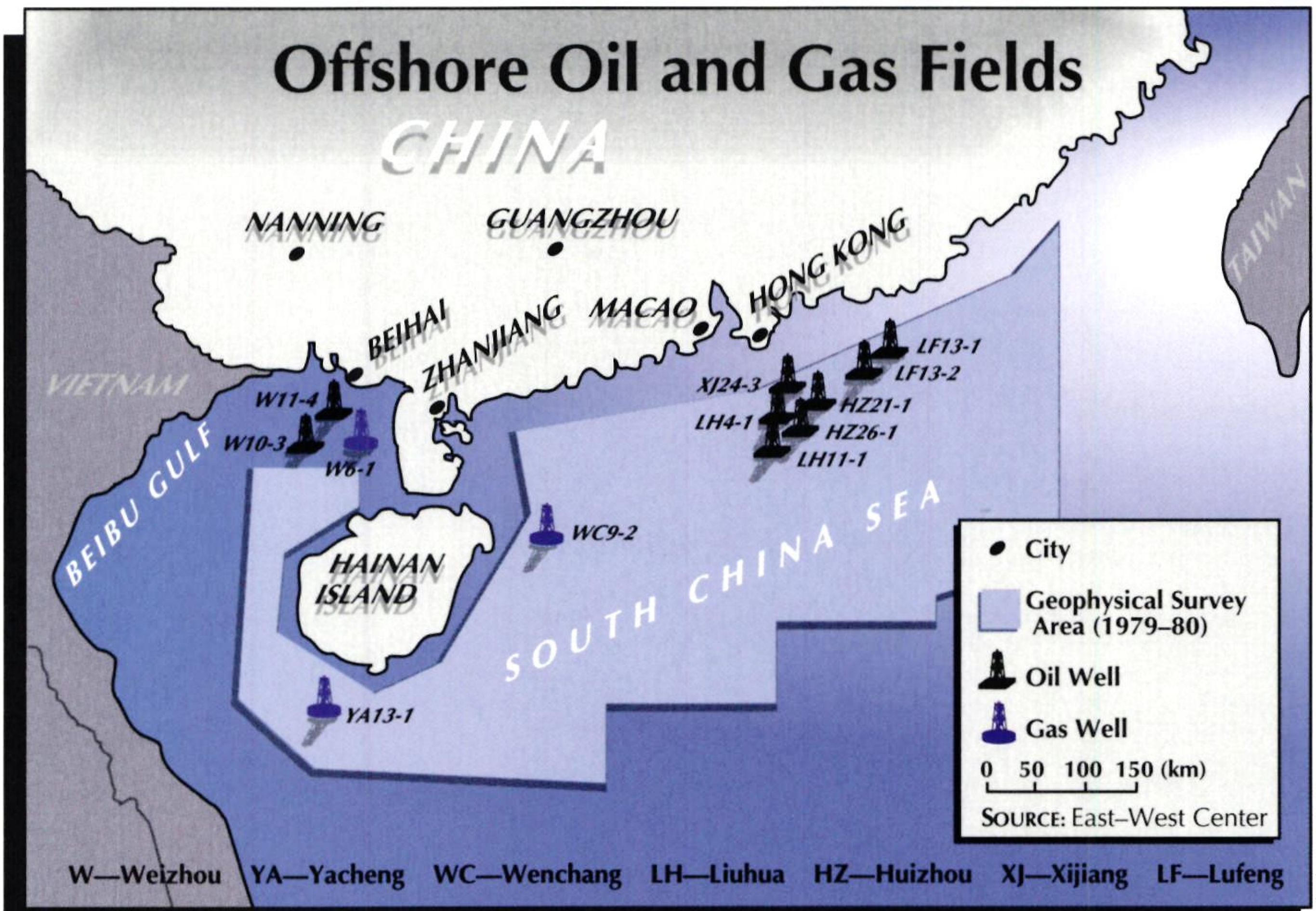
Historically, in their international operations petroleum companies have worked together in joint ventures or consortia. In China too, foreign oil companies have found themselves cooperating in group seismic shoots and consortia. At the start of cooperation in the early 1980s, oil companies with many concerns in common decided it would be less confusing to Chinese tax authorities if a group approach were used to present recommendations for incorporation of certain tax practices.

As might be expected, Chinese tax authorities had misgivings about facing off against a coalition of foreign oil companies. However, Price Waterhouse China, which had worked with both the tax authorities and a number of foreign oil companies since the late 1970s, was able to alleviate the tax authorities' fear that companies would gang up on them. In particular, Chinese officials agreed it would be to their advantage to tap foreign expertise and learn as much as possible about international tax treatment of the oil and gas industry.

### *Working out problems*

The oil companies have provided an educational bridge to the Chinese authorities through tax workshops, which have laid the groundwork for many of China's positive rulings related to the petroleum industry. Price Waterhouse has coordinated four workshops over the past six years, the first held in both Beijing and Guangzhou and the rest in Beijing only. Attended by Chinese authorities from both the STB and OTB and by many of the foreign oil companies operating in China, the workshops have been convened whenever both sides felt mutual areas of concern needed to be addressed. The oil companies generally foot the bill.

During the workshops, foreign representatives explain tax law as it affects the petroleum industry in several other countries. The first




Art by Fred Flerlage

workshop, held in 1984, emphasized, among other topics, the difference between the calculation of a company's tax liability and the contractual criteria used for determining "cost-recovery oil." (China's production-sharing petroleum contract distinguishes between "cost-recovery oil" and "profit oil" once oil production has begun. "Cost-recovery oil" is considered a payment for exploration and development expenses.) Favorable rulings were issued thereafter allowing the tax deduction of either actual or contractual interest and overhead costs, thus ensuring the full deductibility of costs incurred for these items. Prior to the rulings, companies feared that tax authorities would allow deduction of only the amounts specified in the petroleum contracts rather than the full amount of administrative expenditures. Furthermore, even though interest expense is not cost recoverable until the development phase, there was concern that actual interest expense for this period would exceed the percentage of interest specified in the petroleum contract that can be used in calculating cost-recovery oil. These concessions were very important, since during exploration many companies had incurred overhead expenses and anticipated development interest in excess of the contractual amount.

### *Amicable resolutions*

After the next workshop, in 1986, two issues were amicably resolved: onshore/offshore consolidation and the loss carry-forward limitation. In a private ruling, the oil companies operating both onshore and offshore were allowed tax consolidation of expenditures incurred by their onshore and offshore operations, provided the two contracts were held by the same company. This laid to rest the industry's initial concern that China would not permit combination of income and expenses from various operations. They had feared that

## Offshore Oil Contracts

*Each bidding round brings better terms for foreign companies*

The mid-1980s saw only modest oil discoveries off China's coast, coupled with sinking oil prices that removed incentives for exploration. As foreign enthusiasm has diminished for joint exploration projects, China has offered progressively more liberal contract terms through three rounds of bidding for offshore sites. The contracts have particularly improved for marginal fields, with reduced royalties and Chinese personnel costs. A "seismic option," permitting a company to defer exploratory drilling commitments until after exploration data have been collected, represents the most significant concession.

### *The first 'model' contract*

China entered into five bilateral contracts for joint offshore exploration in 1980-82 with the Japan National Oil Co., Elf, Total, and the Atlantic Richfield Co. (ARCO) and issued invitations to bid on an additional 43 contract areas in February 1982. Thirty-three companies participated in this first round of formal bidding. By December 1983, 18 contracts had been awarded to groups encompassing 27 companies from nine countries.

While the exact terms are confidential, a "model contract" issued by the Chinese side set the framework for negotiations. The model, permitting exploration periods of five to seven years split into two or three phases depending on the contract area's size, called for a $1 million signature bonus. Companies had to specify drilling and seismic commitments and bid on a series of "X" or contingent factors related to sharing of production. All exploration costs were to be borne by the foreign company, while China reserved an option on up to 51 percent of any development program, by paying its share of development costs. The model provided for a 15-year production period, a maximum contract term of 30 years, a fixed 12.5 percent royalty, 5 percent ad valorem tax, and 50 percent income tax. All fees and taxes were to be paid in crude oil, leaving the foreign partner with a 15-20 percent share of production.

The China National Offshore Oil Corp. (CNOOC) initiated a second round of offshore bidding in November 1984 with 20 contract areas totaling 106,000 sq km. Although 38 companies purchased data packages, only 24 bids came in, reflecting mixed first-round drilling results and eroding world oil prices. Only eight offshore exploration contracts were signed under second-round bidding procedures, but another 14 bilateral exploration contracts were negotiated outside of the formal bidding round, probably under similar terms. Following the lukewarm second-round offerings, CNOOC made a number of contract concessions during negotiations which were incorporated into the negotiating framework for the third bidding round.

### *Third-round improvements*

The third round of bidding, which lasted from January to April 1989, incorporated a number of changes designed to make the acreage more attractive to bidders. Most important, China introduced a seismic option that permits a company to review seismic surveys before deciding to drill exploratory wells. In areas that have no remaining drillable prospects but where drilling obligations remain, CNOOC may agree to transfer the obligation to an area newly incorporated into the agreement, as was done for Sun Co. in the Tonkin Gulf. In addition, deepwater, high-risk areas would be awarded more acreage and longer exploration periods.

Third-round terms also introduced sliding-scale royalties applying to discoveries of various volumes, and China gave oil-business employees a 50 percent reduction in individual income tax liability. The contracts also reduced pressure to buy Chinese supplies and services, specifying that international tenders would be made for most goods.

Several new contract provisions reduced the cost of local personnel. Training and technology transfer obligations do not begin until a field development agreement has been reached. The number and size of

China would instead tax each block separately, without allowing expenses from unsuccessful blocks to offset income from successful operations.

Representatives from the petroleum industry told the Chinese tax authorities during the 1986 workshop that China's five-year loss carry-forward provision was inadequate to insure full recovery of large development and exploration expenditures. Two months after the close of the workshop, the loss carry-forward issue was partly resolved by two new rulings. The first allowed companies to vary amortization and depreciation to avoid triggering a loss; the second allowed income from trial production to be used to offset exploration costs carried forward, rather than treating it simply as income.

The 1988 workshop focused on tax reform and incentives. It addressed the benefits of tax combination and consolidation, extension of the loss carry-forward provision, and lowering of the tax rate. A number of the petroleum industry's suggestions on how to significantly improve China's investment climate were incorporated in a draft foreign enterprise tax law that was discussed during the 1989 workshop.

The 1988 workshop's discussion on royalties was also fruitful. In December of that year, regulations were adopted to encourage petroleum exploration. Under these regulations, a more attractive royalty system was implemented, which incorporates progressive rates based on production and provides exemptions for smaller oil fields.

In September 1989, representatives of 12 international oil companies and other foreign companies met with leaders of the STB, the OTB, and members of the State Council to discuss China's draft unified foreign investment income tax law and regulations. The new law incorporates such features as a flat tax rate of 33 percent (significantly

joint management committees will be reduced. Salaries of Chinese personnel will be lowered significantly, to no more than 70 percent of wages for counterparts in other Southeast Asian countries. Finally, the new contracts permit application of international practice where no Chinese laws apply, representing a significant improvement for foreign companies.

Third-round bidding included only the most attractive area, the Pearl River Basin, where seven blocks totaling 12,384 square miles were put up for bid in water depths of up to 1,600 feet, requiring high drilling and development costs. Fourteen companies obtained bid documents, including 12 that already had contracts, but few bids were received, probably because of low oil prices, small past discoveries, and development costs. The Occidental group signed the first third-round contract for an area around their Lufeng discoveries, and Amoco was expected to sign a contract in October 1989 for Contract Area 28/11, southwest of its Liuhua discovery.

The third-round concessions significantly improve the contractual framework for offshore exploration in China, and foreign companies operating offshore have welcomed the provisions. The new terms signify a more realistic appraisal on the part of CNOOC and the Chinese government of the prospects for developing the small and mid-size fields on China's continental shelf.

### *Pressing for better terms onshore*

Despite foreign companies' satisfaction with the new offshore contract provisions, they indicate that onshore terms will have to be even better to excite foreign interest. Onshore oil ventures, being more complex than offshore, require working with a wider range of organizations in China's bureaucracy, making development more risky and expensive. Contract terms, especially remuneration provisions, will therefore have to be more liberal. But with the third bidding round, China has shown a deeper awareness of the competitive aspects of the world oil market. If the same spirit is extended to joint exploration of China's western basins, exploration will move ahead rapidly. —Bruce Vernor

**Table 6**
**Third Bidding Round: Royalty Rates**

| Oil Production | | |
|---|---|---|
| **million tons/ year** | **thousand barrels/ day** | **Royalty Percentage** |
| 0.0-1.0 | 0-20 | 0.0% |
| 1.0-1.5 | 20-30 | 4.0% |
| 1.5-2.0 | 30-40 | 6.0% |
| 2.0-3.0 | 40-60 | 8.0% |
| 3.0-4.0 | 60-80 | 10.0% |
| 4.0 + | 80 + | 12.5% |

| Gas Production | | |
|---|---|---|
| **billion cubic meters/year** | **million cubic feet/day** | **Royalty Percentage** |
| 0.0-2.0 | 0-190 | 0.0% |
| 2.0-3.5 | 190-340 | 1.0% |
| 3.5-5.0 | 340-480 | 2.0% |
| 5.0 + | 480 + | 3.0% |

SOURCE: Ministry of Finance

lower than the top rate of 50 percent under the FEIT law) and combination of a single entity's activities for tax reporting. If enacted, it will merge the existing foreign enterprise and joint venture income tax laws.

For the oil companies, the most significant achievement of the 1989 workshop was the long-awaited announcement by tax authorities that precontract expenditures would finally be certified as tax deductible. The tax authorities verified they would accept the audits of the precontract expenditures previously conducted by international accounting firms and agreed that a full audit by the OTB would not now be required. This was an extremely important breakthrough for the petroleum industry, because exploration involves tremendous sums of money—$20 million is not unusual. In December 1989 several oil companies received the first of the OTB certificates approving a large portion of their precontract expenditures.

### *Wide-ranging effects*

Since the companies represented at the September workshop had diverse business operations, discussion focused on the draft law's effects on all industries, not just petroleum. The following areas, however, directly affect the oil and gas industry:

- Multiple project combination: The draft law and regulations seem to permit a single legal entity to file a combined tax return for its various business activities in China, but administrative issues—including where to file and which rates apply—must be clarified. Since most of the oil companies have significant upfront expenditures, increased combination of diverse business activities would provide assurance that these expenses could be deducted against future profits.
- Group consolidation: The workshop discussed grouping to further familiarize the Chinese tax officials with the concept and its applications. Foreign oil companies would welcome a move by China to permit consolidated tax treatment of their China operations, which are often split into distinct companies, such as oil, coal, and refining. Group consolidation would permit oil companies to offset profits in one company with losses in another.
- Foreign currency accounting: Foreign companies are concerned about the basis for exchange conversion in the new tax law. The oil companies, which have a particular stake in foreign-currency accounting because of the magnitude of their costs, would like to insure that accounts can be maintained in a foreign currency to protect against renminbi (RMB) devaluation.

*Oil companies maintain that any costs necessary to conduct business in China should be considered reasonable and pertinent. In the past, China has indicated a willingness to accept the costs of seismic surveys and subsequent data analysis but has shown concern over expenditures related to preparatory efforts.*

### *Seeking specific incentives*

Oil companies are generally satisfied with progress in China's tax regulations. But as China's offshore oil prospects appear less than originally anticipated, China will have to enact specific incentives for the oil industry, including tax breaks, in order to keep foreign companies interested in exploration and development efforts.

Tax authorities recognize the need to improve tax legislation and to keep abreast of the economy's development in order to attract foreign investment. But, as China turns its focus inward, it is uncertain whether progressive tax legislation directed toward foreign investors—such as the draft tax law—will become a reality.

Because of recent changes in Eastern Europe, many foreign companies are looking closely at investment opportunities in East Germany, Czechoslovakia, Hungary, and Poland. Increased foreign investment in these and other countries in the Eastern Bloc could divert financial resources from China. To remain competitive, China must take positive steps to attract foreign investment.

To restore investor confidence, China must demonstrate not only sincere interest, but also ability to keep the door open and make changes necessary to attract and retain foreign investment. For the oil industry, a general ruling allowing onshore/offshore consolidation (the previous ruling was private), and passage of the draft tax law by the National People's Congress would offer proof of China's interest and ability to encourage foreign investment. Actions will speak louder than words. 完

**Daqing, China's largest oil field, accounts for 40 percent of annual oil production.**

# 我会活动 Council Activities

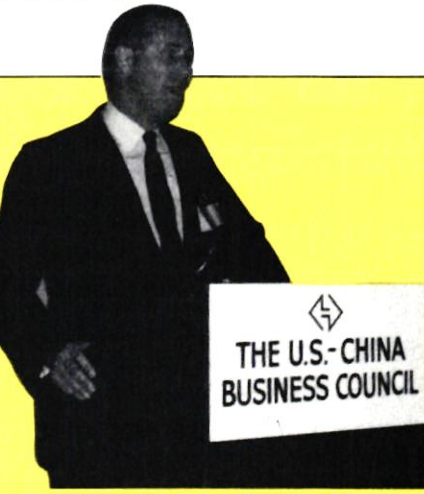
## Forecast '90:
### *Adjusting to Change in China*

The Council expanded its annual Forecast meeting to an all-day format this year, drawing nearly 200 company representatives to share views on financing, investment, and operational difficulties in China. Forecast '90 was held on January 17 at the Mayflower Hotel in Washington, DC and featured guest speakers from the National Security Council, World Bank, Chinese embassy, and Council member companies who discussed ways for business to cope with continuing economic retrenchment and political uncertainty in 1990.

Council economist David Denny (center) talks with Sabina Brady of Modicon and Bert Keidel of Rock Creek Research.

Council President Roger W. Sullivan opened the meeting with an analysis of China's domestic political and economic conditions, speculating on the conditions that will have to be met before China can continue a reform program. Douglas Paal, director of Asian Affairs at the National Security Council, followed Sullivan's talk with a candid, off-the-record speech on President Bush's China policy and its goals. Next, Shahid Burki, director of the China Country Department at the World Bank, relayed the Bank's cautious optimism about China's fiscal position.

Finishing a busy morning session was Martin Weil, the Council's manager of Business Advisory Services, who counseled companies to use 1990 for talks with actual or potential Chinese business partners, increasing equity stakes in some joint ventures, and maintaining—rather than expanding—their presence in China. Huang Wenjun, minister-counselor for Commercial Affairs at the Chinese embassy, gave the luncheon address, emphasizing the Chinese government's position that recent retrenchment policies have been aimed at controlling unbridled economic growth rather than at slowing reform.




Douglas Paal of the National Security Council gives a morning address on the Bush Administration's position on China.

Afternoon workshops brought together speakers from financial institutions, law firms, and member companies ranging from heavy manufacturers to small trading companies. Members shared anecdotes about their businesses in China and advised one another on how to balance foreign exchange and meet export quotas, how to avoid "backdoor" selling of domestic products for the export market, how to cope with accounts receivable problems, and other issues.

## Council Coordinates Mofert Training Program

The second set of trainees from China's Ministry of Foreign Economic Relations and Trade (MOFERT) arrived in Washington, DC in January to study US export controls under a grant from the US Trade and Development Program. The Council is coordinating training that will familiarize Li Chunshen and Song Linjun with US export-control regulations, procedures, and administration. The first set of trainees completed their training in April 1989.

Li, who works at MOFERT to liberalize the Coordinating Committee for Multilateral Export Controls (COCOM) regulations for China, began his training program with Kirkpatrick & Lockhart studying general export-control procedures. He is now with Skadden, Arps for six weeks exploring Chinese re-exports to the East Bloc. Li will spend the final three months of his training with Winthrop, Stimson dealing with export-licensing cases.

Song, who has come to learn more about US export procedures in order to help China implement a workable system of its own, spent one month at the law firm Baker & Botts under the supervision of former Department of Commerce Under Secretary for Export Administration Paul Freedenberg. She is now at Coudert Brothers to gain working-level experience.

During the last week of the trainees' stay, July 2-6, the Council will arrange for member companies to meet with the trainees and exchange ideas, problems, and concerns. Interested companies should contact Kathleen E. Syron or Kelly Ho Shea to set up an appointment.


# Investing in Shanghai

*Since Tiananmen, city officials have taken a more intrusive approach to foreign projects*

**Norman Givant**

Since the beginning of the open door policy in 1979 Shanghai has attracted a great deal of interest from foreign investors. First, Shanghai is the most important industrial city in China. One of the country's most prosperous regions, it produces 9 percent of China's industrial goods and one-eighth of total exports. It has a large and relatively skilled workforce from which foreign-investment enterprises (FIEs) can draw their staff and workers. Its population of 12 million (including surrounding counties) makes it the largest city—and thus the largest potential market—in China.

Shanghai has still other advantages. Its port in a large, well-protected harbor near the mouth of the Yangtze River, handles almost as much cargo a year as Rotterdam's. The city's location at the base of China's longest internal waterway gives it convenient access to raw materials from the interior, and makes Shanghai a natural conduit for Chinese goods bound for export. Shanghai has also been fortunate to have a mayor, Zhu Rongji, who is a strong proponent of attracting and utilizing foreign investment to modernize Shanghai's industrial base. With these advantages, by the end of 1989 Shanghai had attracted over \$2.5 billion in 709 FIEs, or about 3.5 percent of total foreign investment in China.

Despite such advantages, however, the scale of foreign investment in Shanghai has not attained a level corresponding to the city's importance in the Chinese economy, due to significant bureaucratic and structural impediments in establishing and operating ventures (*see* box). Though the problems are typical of those experienced by investors elsewhere in China, the political turmoil of last summer and the ongoing austerity campaign have exacerbated them.

*Calligraphy courtesy of Yang Zhifang*

### *Post-Tiananmen slowdown*

Initially 1989 looked like a banner year for foreign investment in Shanghai. During the first six months, 133 FIEs totaling \$260 million in new foreign investment were approved by local authorities—a nearly 50 percent increase in both number and amount committed over the same period in 1988. However, following the violence in Tiananmen in June, Shanghai suffered from the skittishness of foreign investors concerned with China's political stability and commitment to economic reform. After such a strong start, the value of total foreign investment in Shanghai for 1989 exceeded 1988 figures by less than 10 percent, while the number of ventures approved actually decreased by about 10 percent.

Investor fears aside, the political unrest in itself did not cause a significant deterioration in Shanghai's investment environment, though FIEs have encountered a tougher business environment since June. The difficulties stem primarily from the central government's retrenchment policies of the last 17 months and the political conservatism of the current leadership. FIEs in Shanghai are finding themselves squeezed by both contractionary economic policies and increased Chinese supervision over their operations.

*Norman P. Givant is a partner in the international law firm Coudert Brothers and opened the firm's Shanghai office in 1986. For the past two years he has also served as co-president of the American Chamber of Commerce in Shanghai.*

### *Cash crunch*

Perhaps the primary problem now facing FIEs in Shanghai is a lack of working capital, a result of the central government's restraints on credit. Given the ¥300 billion chain of unpaid accounts receivable backed up throughout China's economy, many Shanghai FIEs have found that their customers have no cash to pay them. Accounts receivable that normally would have been collected in 30 days in 1988 are now often unpaid after 120 days. As of the end of 1989 some individual FIEs had accounts receivable exceeding ¥9 million, and foreign managers started demanding cash on delivery. While domestic customers often still had cash to buy FIE products, those products were not showing up in stores because local distributors lacked money to buy the products from the manufacturers.

The problem has been compounded by the very limited supplies of renminbi (RMB) local banks have available to lend to FIEs. The funds they have, moreover, are expensive (17 percent annual interest on short-term RMB loans). Local banks also have little foreign exchange to lend FIEs, and foreign banks are wary of assuming any more China risk.

The credit crunch became so acute by the third quarter of 1989 that the Shanghai municipal government was unable to arrange foreign-exchange commitments or loans from local banks to assist two major, highly visible and highly publicized construction projects in Shanghai. As a consequence, one project was temporarily put on hold, and the foreign shareholders of the other were forced to dig into their own pockets

## FIE Headaches

A recent survey of the Shanghai foreign business community conducted by Eoghan McMillan, a member of the International Businessmen's Advisory Group to the Mayor of Shanghai, revealed a fairly extensive list of grievances with the investment climate in the city. Many of the complaints concern the negotiating process, since on average it still takes two years to negotiate and sign a joint-venture (JV) contract in Shanghai. Negotiations tend to be prolonged due to several factors:

- **Too many cooks.** A foreign investor in Shanghai may find it necessary to negotiate concurrently with as many as 20 people representing diverse departments with different agendas. It is also not uncommon for Chinese departments to change negotiators in midstream, further slowing the pace of negotiations while the new participants are brought up to date.
- **Unfamiliarity with international practice**. Much of a foreign negotiator's time is spent trying to educate Chinese counterparts on standard international practices that often do not mix well with the educational and ideological orientation of many Chinese negotiators.
- **Aversion to risk**. Given the limited rewards for success and high costs of failure in the Chinese system, Chinese negotiators are extremely reluctant to assume what Westerners would consider normal entrepreneurial risks. Chinese negotiators, therefore, usually try to persuade foreign investors to both assume most of a venture's risk and to stand as the venture's guarantor—unattractive propositions for most investors. Risk aversion is also manifested in the Chinese practice of negotiating simultaneously with several companies for the same project, which drags out negotiations and increases mistrust on both sides.
- **Impractical goals**. Chinese investors often seek to build large-scale projects utilizing the most advanced technology without determining whether the product is economically feasible, whether there will be a large enough market for the volume of goods produced, or whether employees can absorb the technology.
- **Secrecy**. Chinese negotiators often cite internal laws and regulations that contradict published ones and cannot be shown to foreign counterparts—an obviously irksome practice to foreign companies.
- **Diverse objectives**. The objectives of many Chinese and foreign investors are often quite different, with the Chinese generally seeking to import foreign technology to upgrade their operations and produce goods for export, and the foreigners seeking to develop markets for their products in China. In addition, foreign-investment enterprises (FIEs) are usually expected to export at least enough to balance their foreign-exchange requirements, regardless of international market conditions or the quality of the products.

### *Operational problems*

Once a venture has completed negotiations and actually entered operation, it encounters different problems. The survey noted complaints in three general areas:

- **High housing costs**. Suitable housing for foreigners in Shanghai is scarce and very expensive (up to $70,000 for a modest pre-fabricated house). This significantly increases the cost to the FIE of maintaining expatriate personnel in China.
- **Labor issues**. FIE managers still face significant constraints in hiring, disciplining, and firing workers. New labor union regulations may further inhibit managers (see p. 30).
- **Procurement problems**. Generally, only limited quantities of raw materials are available to FIEs through the State plan. Procuring raw materials on the free market is difficult and expensive, and quality is erratic.

None of these problems is unique to Shanghai, and some attempts—such as streamlining the approval process and recentralizing distribution of certain key commodities and inputs—have been made to alleviate them. Most, however, have gotten worse since last June. Investors can only hope that the recent precipitous decline in foreign investment in Shanghai will spur local authorities to complement their public relations campaign with meaningful action to address and resolve these problems. —NPG

for an additional $20 million to complete the project.

Recognizing the serious damage the lack of credit was causing, the central government announced an emergency injection of ¥100 billion into the economy in late November 1989. Although it is still too early to tell, this infusion may alleviate somewhat the shortage of cash in Shanghai.

### *Changing the rules*

In the face of the current shortage of foreign exchange in China, the central government is trying to maximize foreign-exchange revenues in order to meet foreign-debt repayments due in the next three years. This frenzy to earn foreign exchange often undermines the government's stated policy of creating an attractive environment for foreign investment, especially when local departments are left to their own devices to fulfill foreign-exchange quotas.

In Shanghai, the rush to collect as much foreign exchange as possible is clearly seen in the increasingly frequent attempts of local units to try to assess charges for their services to FIEs in US dollars or foreign exchange certificates (FECs) rather than RMB. For example, while in the past, FIEs could pay their domestic and international telephone bills in RMB, they are now being asked to pay in FEC. Even more disturbing, the local economic and technological development zones, which were set up under grants of authority from the State Council to attract foreign investment to Shanghai, are asking that site-use fees be denominated and paid in US dollars or their FEC equivalent. Given the difficulty FIEs have in balancing foreign exchange to begin with, the attempt to charge for local land in foreign exchange is not only inequitable but is a significant disincentive to foreign investment.

Perhaps the ultimate absurdity in the attempt to squeeze foreign exchange from whatever source possible was an internal notice from the State Administration of Exchange Control (SAEC) sent to the local department in charge of newspaper circulation in Shanghai. The notice instructed the department to demand payment in FEC rather than RMB for local newspapers purchased by FIEs in the Union Building, a modern building on the Bund housing several FIE offices.

Shanghai officials are shifting rules not just to maximize foreign exchange inflows, but also to minimize foreign-exchange outflows. In the past FIEs have been relatively free to purchase equipment and raw materials from abroad and to incur overseas travel and training expenses as they deemed appropriate. But in the last quarter of 1989 several FIEs in Shanghai complained that the SAEC was actually trying to control their Bank of China foreign-exchange accounts, allowing or disallowing every foreign-exchange payment. Local authorities have as yet taken no action to resolve this problem.

In another recent example, an FIE purchased and had shipped to Shanghai a piece of equipment specified in its feasibility study and contract. When the equipment arrived, the foreign investor was told it could not be cleared through Customs. A new internal directive mandated that the item could no longer be imported, since China had the capacity to manufacture it. The issue has been referred to authorities in Beijing and is as yet unresolved.

### *Diminishing local autonomy?*

Though geographically Shanghai is far from Beijing, it has not escaped the grasp of the conservative, orthodox atmosphere emanating from the capital, and some projects that previously could have been approved by local authorities are being booted up to central authorities in Beijing. In one wholly foreign-owned investment project Coudert Brothers worked on last year, approval authority fell within the scope of the Shanghai Foreign Investment Commission (SFIC). However, after June the project had, as an internal matter between Chinese approval authorities, to be vetted by the Ministry of Foreign Economic Relations and Trade (MOFERT) as well. Final approval of the project was then delayed a bit longer while it was also vetted by the Shanghai Municipal Foreign Economic Relations and Trade Commission (FERTC). The history of this particular venture suggests that since June MOFERT has taken back some of the authority it originally delegated to the Shanghai approval authorities. The lines of authority between SFIC and Shanghai FERTC are no longer as clear as they once were, with FERTC perhaps moving to regain some of the authority it relinquished when the SFIC was first established. Until these jurisdictional issues are resolved, potential investors in FIEs can expect at least 30 days to be added to the normal approval process in Shanghai.

### *A new view of investment*

While it is still too early to make a definitive assessment, there does seem to be a shift taking place in the way Shanghai authorities treat FIEs. The new approach seems to give more assistance, but at the same time subject FIEs to greater control. This attitude can best be seen in a series of new regulations promulgated by the Shanghai authorities since June 1989 (*see* below).

Regulations covering purchase and sale of products by FIEs, price controls, labor unions, and the handling of complaints all indicate that the Chinese intend to increase their supervision of FIE operations. While it is still too early to judge how these new regulations will be implemented, the attitude they reflect does not bode well for FIEs in Shanghai—and possibly for FIEs in other regions, as Shanghai may be a test case to gauge foreign response before introducing such legislation on a broad scale. But if the regulations are used by local bureaucrats to expand their control over the operations of FIEs—treating them like State-owned enterprises in a Soviet-style planned economy—Shanghai officials will soon discover that foreign investors will take their money and their technology elsewhere. 完

# New Rules for Investors

## *A mixed bag of regulations will do little to increase investor confidence*

**Timothy A. Gelatt**

Though Shanghai's obvious advantages make it an ideal investment site in theory, in practice, foreign companies negotiating investment and other business projects in Shanghai over the last decade have found the benefits often outweighed by disadvantages: a slow and procrustean bureaucracy, difficulty of access to information, obstinate negotiating attitudes, and, more recently, a host of economic and financial problems stemming from China's overall economic woes (*see* p. 29).

The Shanghai administration has taken steps to respond to foreign investors' concerns since 1986, when it promulgated local counterparts to the national investment-encouragement regulations. Then, in 1988, Mayor Zhu Rongji established the Shanghai Foreign Investment Commission (SFIC)—known to foreign businesspeople as the "one-chop shop"—to streamline the approval process for foreign projects (*see* p. 35). The SFIC has significantly helped certain foreign ventures resolve problems involving a number of different administrative authorities, including problems with land-use rights, labor, and financing. But no sooner had these improvements begun to be felt than they were overshadowed by the economic and political crises of 1989.

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A series of new local regulations relating to foreign investment enterprises, promulgated in 1989 by the Shanghai Municipal People's Congress, covers prominent issues of concern to foreign investors—labor, purchases of raw materials, and pricing. Another set of local provisions implemented in early 1990 covers the resolution of disputes arising in foreign-investment projects. The new regulations generally do not provide much ground for encouragement but reflect the nationwide trend toward eroding the autonomy of foreign investment projects and increasing control over their operations. In a number of areas, Shanghai's new legislation goes beyond local and national rules to impose new restrictions and create potential sources of interference in the affairs of foreign business enterprises.

*Shanghai's 'one-chop shop,' established to streamline the approval process for foreign projects has significantly helped certain foreign ventures resolve problems involving land-use rights, labor, and financing. But no sooner had these improvements begun to be felt than they were overshadowed by the economic and political crises of 1989.*

### *Giving unions more clout*

Legislation concerning trade union activity has attracted much attention recently, particularly given its promulgation in the highly charged political atmosphere of summer 1989. In the past, foreign investors have made generally favorable reports about unions in their ventures, saying the unions usually do not interfere with management or operations and on occasion have been helpful in resolving labor disputes. Nevertheless, investors have always expressed concern about the presence in joint ventures of trade unions, whose rights and functions are already covered in a number of earlier Chinese and Shanghai statutes.

The Regulations of Shanghai Municipality Concerning Trade Unions in Chinese-Foreign Equity Joint Ventures give trade unions broader rights in the labor affairs of joint ventures than they enjoyed under earlier rules. Although only equity joint ventures are mentioned in the title, the regulations are stated to apply by reference to cooperative and wholly owned enterprises.

• **'Legal personhood':** The regulations provide for the first time that trade unions in joint ventures have "legal person" status. This status will enable a union to exercise civil rights and assume civil responsibility—for instance, signing contracts and bringing lawsuits—as an independent unit. This would presumably give a trade union the right, for example, to bring a lawsuit against the joint-venture company in which it is established.

• **Full-time union work:** Another potential concern for Shanghai joint ventures that already feel burdened by local labor costs is a reference to trade-union members who are "removed from production," or who work full time on trade-union affairs. Shanghai trade-union authorities determine the wages of such full-time unionists, and the joint venture pays their wages out of the union fund all joint ventures must establish.

Small joint ventures may take comfort, however, that under the 1950 Trade Union Law, enterprises with fewer than 200 staff members need not have full-time union personnel. Enterprises with 200-500 personnel are to have one full-time trade-union employee, those with 501-1,000 are to have two, and so forth, reaching five full-time union workers for an enterprise with 2,501-4,000 employees.

Joint ventures may not dismiss full-time union officials without the approval of the enterprise, the union, and the trade-union organization with administrative control over the enterprise union. Furthermore, ventures are responsible for arranging work in the enterprise for full-time union employees once their terms of office in the union have expired.

A provision allowing staff members to spend up to two days of company time per month on trade-union work raised the hackles of foreign business managers—though it reflects a longstanding provision in the *Trade Union Law*. Occupation of work time by union activities has not frequently been a major complaint of foreign investors in Shanghai.

• **'Political guidance' role:** The trade union's duty, as enunciated in the regulations, to organize staff and workers to "study politics" sent an alarming signal to foreign investors, but this also restates older provisions. After considerable discussion at the Shanghai People's Congress, the regulations also added a new reference to the union's duty to educate workers on laws, regulations, and the constitution. The reference to the constitution was presented at the Congress as a subtle way of ensuring that the four basic principles enshrined in China's constitution—the leadership of the Communist Party, Marxism-Leninism-Mao Zedong Thought, the people's democratic dictatorship, and the socialist system—would be part of a joint-venture worker's educational program. In practice, however, while companies in Shanghai have reported increased political study in their ventures since June 4, few have cited this as a major impediment to business.

• **Administrative role:** Of greater concern to foreign ventures is the erosion of their freedom of decision on labor matters. First, the regulations permit nonvoting union delegates to participate in discussions of the "administration"—or management—of joint ventures relating to labor, as well as at board meetings, as previous law allows. It is unclear whether this provision will be construed to give trade-union representatives the right to attend only formally scheduled meetings among the management staff of a joint venture or whether they will also be entitled to participate in routine discussions of labor matters.

Furthermore, the new regulations require that a joint venture "obtain the agreement" of the trade union to extend the working time of staff and workers. This provision goes significantly further than Shanghai's own labor regulations for foreign investment enterprises, which require joint ventures only to "seek the views" of the trade union in order to have workers work extra shifts or overtime.

The regulations also give unions, whose views must be sought under both the new and previous regulations on management dismissals or sanctions of staff, a new role in "supporting" staff and workers in submitting disputes over dismissals or sanctions to arbitration or litigation.

While the regulations impose a number of new restrictions on a foreign investment enterprise's power to set labor policy, they do not alter the right of enterprises to negotiate individual labor contracts case by case, as has become common practice. These contracts, generally based on a form negotiated between the joint-venture parties, must, of course, comply with relevant labor legislation, including the new union regulations.

• **Fattening the union purse:** National law requires all equity ventures

## *Keeping Shanghai Attractive*

*Ye Longfei, executive vice chairman of the Shanghai Foreign Investment Commission (SFIC) and newly appointed vice chairman of Shanghai FERT (Foreign Economic Relations and Trade Commission), recently visited the United States as part of a UNDP-sponsored delegation to introduce foreigners to development plans for Shanghai's proposed Pudong New Area. He spoke to Associate Editor Pam Baldinger about the investment climate in Shanghai and Pudong.*

**CBR:** *Shanghai is somewhat notorious in the foreign business community for its formidable bureaucracy. What steps have you taken to reduce red tape and improve the atmosphere?*

**Ye:** By making SFIC a one-stop shop that coordinates all municipal levels of the various ministries so that only one "chop" is needed for approval of foreign-investment enterprises (FIEs), we have reduced the bureaucracy and amount of time it takes to approve local projects. Before this "one-chop shop" was created, I heard of one foreign company that had to receive 133 chops before it could begin its project! Also, we try to save companies time by giving them a definite "yes" or "no" answer.

**CBR:** *What can you tell us of Shanghai's recent establishment of an FIE complaint coordinating center?*

**Ye:** We have not established a complaint center as such, but rather are trying to implement a new network for handling complaints. Before, all complaints involving FIEs automatically went to SFIC. This bogged down the resources of SFIC and enabled other units to evade responsibility for handling problems. Now, each department will be responsible for appointing one person to deal with complaints. Each department will be supervised, and SFIC will handle complaints that straddle department lines. This is an experiment to make departments develop a sense of public service. The program is effective February 1, and we will make public to FIEs the new procedures and to whom they should direct their complaints.

**CBR:** *Should companies expect any new foreign investment regulations in 1990?*

**Ye:** We expect that the amendment to the 1979 joint venture law will be passed by the National People's Congress in April. The new law will permit either a Chinese or foreign chairman and will not limit the term of the joint venture. In Shanghai we are drawing up local implementing regulations to accompany the new law. Some of these regulations deal with salaries, particularly salaries paid to Chinese employees of FIEs. We want to ensure labor competitiveness and reduce inequalities in Shanghai, and therefore some kind of wage ceiling will probably be stipulated.

**CBR:** *Many foreign companies are concerned that under the austerity program import substitution will no longer be looked upon favorably by Chinese authorities approving FIEs. What is Shanghai's policy on import substitution?*

**Ye:** We are still very much interested in import substitution—maybe even more than before. I also think that companies engaging in import substitution will now be more competitive in the domestic market, since the devaluation has made imports more expensive.

**CBR:** *Will FIEs whose costs have risen because of the devaluation be allowed to raise the prices of their products for sale domestically?*

**Ye:** This decision is up to the company involved, unless they are selling items controlled by the State Price Bureau. We will not prevent them from raising prices if the goods are not on this list.

**CBR:** *What plans do you have for the Pudong New Area?*

**Ye:** We welcome foreign participation both in developing the infrastructure of Pudong—which means east of the Huangpu River—and in setting up operations there. Pudong is a long-term project, development of which will continue into the next century. We believe it will make Shanghai an even more attractive investment locale for foreign businesses.

to pay an amount equal to two percent of total staff salaries into a trade union fund. Although one internal central labor document of several years ago stated that this total was intended to include foreign staff wages, in practice, local authorities in Shanghai and other cities have often approved joint-venture contracts explicitly limiting the basis for the two percent to the wages of Chinese staff and workers. The regulations make a subtle change to the previous language by adding the word "all" before "staff and workers," a modification which may well be intended to remove any doubt, at least in Shanghai after promulgation of the new regulations, as to the need to include foreign staff salaries in the calculation.

***Restrictive price controls***

The trade-union regulations have made headlines, but Shanghai's new, more restrictive legislation on the regulation of pricing for foreign investment enterprises is worthy of even greater concern at a time when businesses need more—and not less—economic flexibility in order merely to survive.

The Measures of Shanghai Municipality Concerning Price Control for Enterprises with Foreign Investment, implemented in July 1989, go considerably farther than previous national and city investment regulations in restricting the discretion of foreign investment enterprises to price their products for domestic and export sales. The price measures cover both purchase and sale prices; they provide guidelines for prices foreign enterprises pay to purchase domestic materials, and they restrict pricing policies for the enterprises' sales.

On purchases, the price measures generally repeat earlier stipulations that foreign investment enterprises must pay for domestic goods and services in renminbi (RMB) at domestic Chinese prices, with certain specific exceptions, including a list of highly controlled precious metals and resources. But the price measures recognize that foreign enterprises must often pay negotiated market prices for goods and materials outside the State or municipal allocation plans—prices that are frequently the bane of foreign ventures since they are often far above international market prices for the same

*The trade-union regulations have made headlines, but Shanghai's new, more restrictive legislation on the regulation of pricing for foreign investment enterprises is worthy of even greater concern, at a time when businesses need more and not less economic flexibility in order merely to survive.*

materials as a result both of scarcities and the poor bargaining power of many enterprises that buy relatively small quantities of materials. The measures provide no assistance to foreign investors in obtaining a greater portion of inputs at planned prices.

On sales, earlier legislation allowed enterprises to set export prices on their own and simply report them to the price authorities "for the record." The new measures impose a requirement that enterprises set export prices that are not "obviously lower than the market price of the same type of product in the country or region to which they are being exported." Depending on how strictly this rather baffling provision is interpreted in practice, it may tie the hands of foreign-investment enterprises that are required to balance their own foreign exchange by prohibiting them from selling export products at lower-than-market prices to gain acceptance on international markets and earn needed foreign exchange.

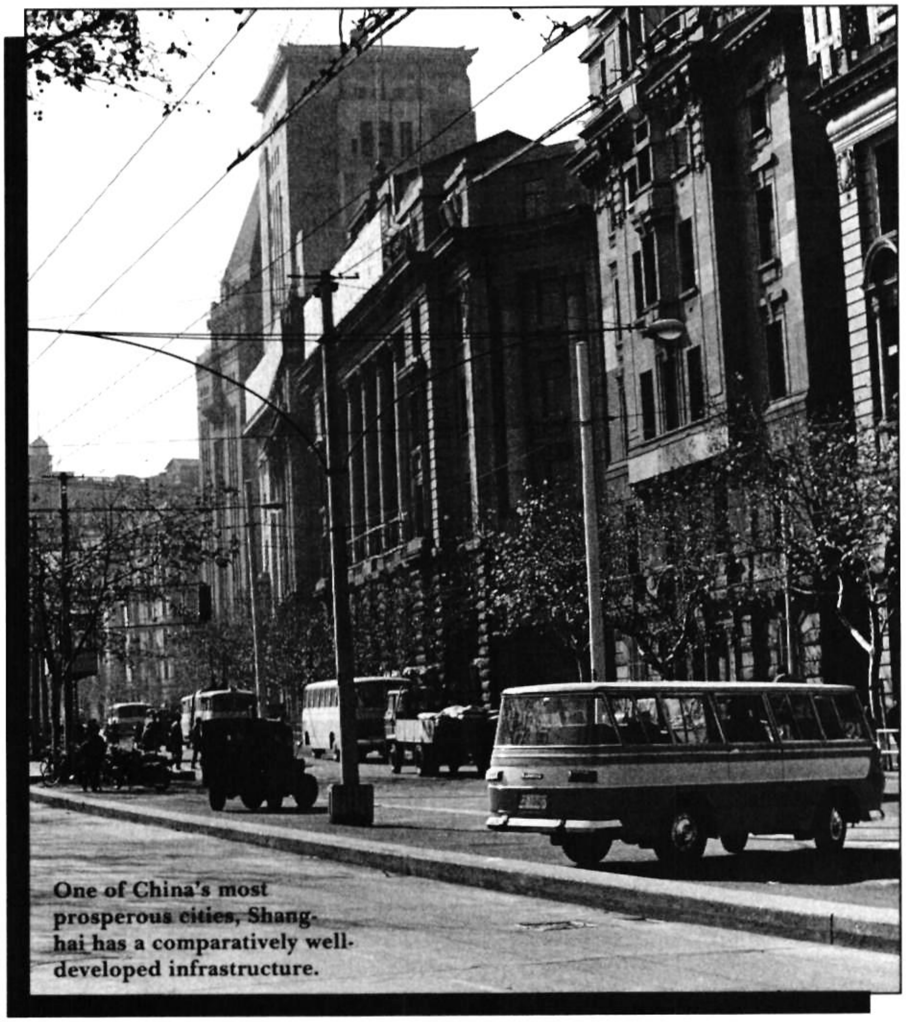
No specific mechanism is provided to allow price authorities to approve or object to export prices that foreign enterprises must still report to them only "for the record." However, the price measures add the disturbing prospect that if foreign investment enterprises "intentionally keep down" their export prices, the municipal price-control departments may unilaterally "arrange" for local units to purchase the relevant products at the export price.

The measures also impose new requirements on the pricing of goods for domestic sale. The 1984 Shanghai provisions on pricing, like national regulations on this issue, had required foreign investment enterprises to set domestic prices "in accordance with" China's domestic price controls then report them to the department in charge of the enterprise and to the price-control authorities "for the record." For goods with State-set prices, the measures change "for the record" to "for examination and approval."

While even reporting "for the record," as used in Chinese legislation, allows for objection by relevant authorities, it is not generally interpreted to impose a requirement that an enterprise await approval before proceeding. The "examination and approval" requirement means that enterprises will need to obtain clearance from the department in charge and the price authorities before selling at their proposed prices—and the regulations specify no time frame for the approval process. It is unclear whether enterprises with foreign investment will need to adhere precisely to State-set prices for controlled goods in order to obtain approval.

For products that fall into a category of goods without any price controls, enterprises must only report their prices for the record. An intermediate procedure is established for those goods whose prices are "guided" by the State, meaning that the State stipulates a range within which enterprises may set prices. In these cases, enterprises with foreign investment must submit their prices to the department in charge and the price authorities for "examination," and if they have not heard otherwise in 15 days, may proceed on the assumption that their pricing has been approved.

Apart from adding to the restrictions and red tape for foreign investment enterprises, the measures do provide a welcome grievance procedure for enterprises that are victims of price-regulation violations by Shanghai units. Complaints may be filed with either the municipal price departments or the SFIC. The agency contacted is required to report to the enterprise within one month of receiving a complaint.



One of China's most prosperous cities, Shanghai has a comparatively well-developed infrastructure.

planned supply of materials—as has sometimes occurred in practice without specific legislative backing.

Some investors have helped alleviate difficulties in obtaining raw materials by establishing their own raw-material production capability, and the purchase measures promise preferential treatment to joint enterprises formed with domestic materials suppliers for this purpose, in line with national and local provisions encouraging "horizontal economic integration." These enterprises potentially enjoy tax holidays under China's domestic income tax laws as well as a reduction in the burden imposed by the domestic product tax. The purchase measures do not indicate whether similar benefits would be available to foreign investment enterprises that integrate production of raw materials within the enterprise.

### *Relieving disputes*

More and more disputes have inevitably arisen in the course of implementing contracts, as Shanghai's business environment grows more complex. In addition to disputes between Chinese and foreign contract parties, the courts are handling more disputes between foreign investment enterprises and Chinese units they do business with: Shanghai courts handled 46 such cases in 1988 and the first half of 1989, a 350 percent increase over the total number of cases encountered in prior years.

The Shanghai branch of the China Council for the Promotion of International Trade (CCPIT) is in the process of formally establishing an arbitration commission to handle disputes. In addition, the Shanghai government has devised a system for handling claims by a foreign investment enterprise or investor against a local organization. The Measures of Shanghai Municipality for the Filing and Handling of Claims of Enterprises with Foreign Investment were drafted in the summer and fall of 1989, and the draft was circulated to representatives of foreign investment enterprises for comment at a series of forums—a welcome procedure, which Shanghai legal officials say will be repeated with other new foreign-investment legislation. The claims measures took effect on February 1, 1990.

### *Goods and materials: status quo*

The Measures of Shanghai Municipality Concerning the Purchase of Goods and Materials and the Sales of Products by Enterprises with Foreign Investment, which took effect in July 1989 and replace 1984 measures on the same subject, make fewer negative changes to previous legislation than the price measures. While they fail to resolve problems Shanghai foreign investment enterprises face in obtaining local materials, the measures do clarify certain procedures concerning the purchase of Chinese and imported goods and sales by foreign-investment enterprises.

The measures reiterate the long-established proposition that foreign investment enterprises may directly import and export goods, as long as they obtain the necessary licenses. The measures make a welcome pledge that licenses issued by the Shanghai Municipal Foreign Economic Relations and Trade Commission (FERTC) will be processed within five days of receipt of the application. Also potentially useful is a provision stipulating that municipal approval authorities will "coordinate in advance" with the Shanghai FERTC on investment projects involving licensable exports, apparently in order to obtain approval in principle for export licenses before an enterprise is even established.

Like the pricing measures, the purchase measures offer no particular encouragement to enterprises that face the difficulty of obtaining adequate supply of raw materials at economically viable prices. The provisions do offer one potentially constructive contribution on the raw-materials problem, providing that the "goods and materials supply channels for the Chinese investor" shall be maintained after the establishment of the venture "in accordance with the circumstances of (the Chinese party's) participation in the investment." This obtusely drafted provision apparently is aimed at giving foreign investment enterprises the benefit of the Chinese partner's

The claims measures are extremely broad in their potential coverage, purporting to apply to the resolution of all "differences of opinion" between foreign investment enterprises and related units and their personnel, or other difficulties encountered in the course of investment, construction, production, operations—or liquidation, a reference added to the measures during revisions, suggesting that authorities have acknowledged that some joint ventures are beginning to unravel.

The claims measures provide not only for claims by foreign investment enterprises, but also by individual Chinese or foreign investors in existing or pending enterprises. The new measures do not apply to cases in the jurisdiction of other authorities; businesses that object to trademark or tax rulings, for example, must appeal to higher trademark or tax authorities.

All of Shanghai's municipal commissions, bureaus, districts, and counties are beginning to establish offices—staffed by personnel required to have some legal training—to handle claims, and to publish the specific scope of the claims they will accept. A Shanghai Municipal Coordination Center for the Filing of Claims by Enterprises with Foreign Investment, consisting of members of relevant municipal government offices and with its office within the SFIC, will coordinate and review the work of claims offices in various agencies.

After a claim has been filed with the relevant office, a reply is normally required within one month, though this deadline may be extended if the office explains to the claimant when a "complicated" matter is involved. Claimants dissatisfied with the decision of a claims office may apply to the office for reconsideration, and if they still disagree with the reconsidered decision, appeal to the Coordination Center.

Although the measures are a welcome step, they leave many questions unanswered. Most important, if the investigation of a claim filed within a given claims office's realm of jurisdiction reveals an illegal or unfair practice by a local unit, the new measures do not provide for any specific action other than the issuance of a "reply" to the claimant. Unless the claims agencies have concrete authority to order correction of violations, they will be of limited value. Another question is whether the Coordination Center will develop an effective role as the ultimate arbiter in cases of interagency conflict. Of course, recourse to the new claims offices will not be final, and investors may still resort to arbitration or litigation.

### *Progress or placebo?*

Whether the new rules on investor claims will provide true relief to foreign investors' business headaches in Shanghai or remain merely a paper placebo will remain an open question. In the meantime, the promulgation of the measures suggests that Shanghai recognizes serious problems in the local business environment and knows it must work harder if it wants to continue attracting foreign investment. 完

上海

# Grinning and Bearing It

*Developers of the huge Shanghai Centre are determined to conquer political, financial, and structural obstacles*

**Pam Baldinger**

To Atlanta-based architect and international developer John Portman, Shanghai was a find. A city with a reputation for both business acumen and glamor, seeking to regain its international prestige. A city desperately unable to accommodate the foreign businesses and visitors it longed to attract. And a country expanding its economy and contacts with the outside world at a tremendous pace. The future for a massive all-purpose real estate project looked bright—and after over 40 visits between 1979 and 1985, Shanghai Centre was conceived.

In 1990, the picture is not quite so rosy. Political instability and economic retrenchment have deterred tourists and businesspeople alike, while a four-year building spree has overloaded Shanghai with some 18,000 hotel rooms—probably excessive even in a good year.

Nevertheless, Shanghai Centre is prepared to tough it out. The project's foreign partners dug into their own pockets to provide a $20.5 million cash infusion to complete construction, allowing the Centre to mark its soft opening on March 1. Now, with foreign business and tourism still in a lull, the partners are taking a fresh look at the project's terms to ensure Shanghai Centre's viability through the 1990s.

### *'A city within a city'*

Shanghai Centre comprises a hotel (the Portman at Shanghai Centre), apartment towers, office space, exhibition hall, theater, and shopping mall—making it the largest foreign real estate project in Shanghai, and the third-largest American investment in China to date. The project is a cooperative venture between Seacliff Ltd. (composed of the US firms The Portman Companies and American International Group [AIG] and the Japanese construction company Kajima Corp.) and the Shanghai Exhibition Center. The Centre occupies a prime four-acre site on Nanjing Road, and features top-of-the-line facilities. The complex's three towers—one of which hits 50 stories—now dominate the Shanghai skyline, but its developers have even loftier goals—that Shanghai Centre will become the focal point of international business and culture in the city.

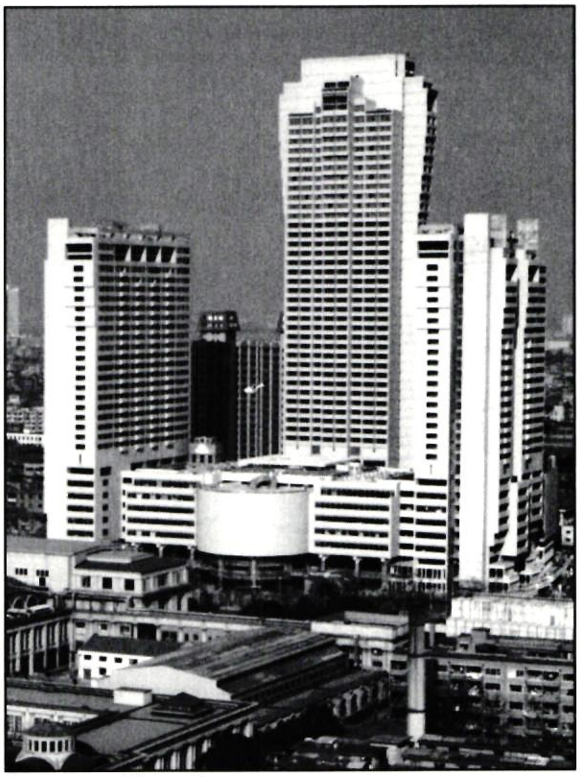


*Photo courtesy of Portman Overseas*

Negotiations for Shanghai Centre were concluded in 1985, when forecasts for market growth were bright. The project was expected to open in the summer of 1989 at a total cost of $175 million, to be paid off within nine years. However, the combined forces of inflation, overbuilding in Shanghai, and a soft travel market have significantly increased the project's costs and risks.

### *June 4: the immediate impact*

When demonstrations and violence swept through China last June, construction of Shanghai Centre was about 75 percent complete, and Seacliff was planning a December 1989 opening. Following the Tiananmen incident, however, foreign construction crews were pulled from the site and construction stopped for about one month. That one month ended up costing about three months of construction time due to difficulty in recalibrating the construction schedule, thereby delaying Shanghai Centre's opening date. Hiring plans were also thrown off by the turmoil; mass recruitment was originally scheduled to begin with a June 5 ad campaign, which was postponed until late September.

The effects of Tiananmen reach much farther, however. It has become painfully clear that feasibility studies conducted in 1985 could predict neither political instability nor economic retrenchment and the painful impact both would have upon

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Shanghai Centre. Tourist travel, which was booming in 1985, optimistically will take at least one more year to regain 1988 levels—by which time there will be at least five more hotels competing for the business. Economic retrenchment has slowed business travel, and deterred new companies from establishing themselves in ultra-bureaucratic Shanghai. All of these factors have led the Seacliff partners to reexamine—and renegotiate—the terms and financing of the project.

### *Rescheduling debt*

Shanghai Centre's financial troubles were evident even before June. By the spring of 1989 it was clear that the 1985 projection of $175 million was not going to be sufficient to complete the Centre—inflation in China had sent the cost of materials soaring and infrastructural problems had slowed construction. In April the Shanghai Centre partners and their creditors—19 banks that had provided the bulk of the Centre's financing with a $145 million syndicated loan—entered into negotiations to discuss refinancing the project. It took nine months for them to reach a conclusion in January 1990.

The arduous negotiating process was complicated by the fact that the Bank of China (BOC) is both a lead lender and lead guarantor of the project. Even before June, China, in the midst of a severe credit crunch, was unable to provide a cash infusion to the project. Following Tiananmen, the foreign lender banks grew increasingly concerned about China's country risk, and therefore about BOC's ability to guarantee the loan. Unwilling to increase its own exposure on the project, one bank even proposed that the borrowers use their own credit to guarantee it. To demonstrate their long-term commitment to Shanghai Centre, in August the foreign partners came up with $20.5 million to complete construction.

Under the new agreement, none of the creditors has increased their financial commitment in the project and no additional creditors have been introduced to spread the risk. However, Seacliff now does not have to repay the majority of the principal until the end of the nine-year payback period, which has not changed, and will pay only interest for the first few years.

This arrangement will give Shanghai Centre some breathing time for the next few years, but it will probably have to refinance the project in about five years when the bulk of the principal starts to fall due. In the meantime, in order to further improve the project's financial position, Seacliff has also been negotiating with Chinese authorities to restructure the terms of their contract.

### *A helping hand—or a costly precedent?*

Seacliff's restructuring strategy involves trying to protect the Centre from large operating deficits by seeking concessions in two basic areas: terms of its lease and taxation.

- **Lease terms**. Seacliff has requested an extension on its existing 18-year operating period. According to Chinese sources, it was initially offered a four-year increase, but rejected this offer as insufficient, and asked for a 40-50-year lease. An extended lease would help ensure that the Seacliff partners receive a return on their investment.
- **Taxation**. Seacliff is seeking tax exemptions or reductions to increase cash flow, specifically requesting property tax exemption for at least the first year of operations.

Negotiations on these issues have been underway in earnest since July 1989, and are expected to conclude not long after the Centre's opening. Seacliff representatives are optimistic that they will obtain some concessions, but also report frustration with the bureaucratic process. Because of the size and visibility of Shanghai Centre, any decision concerning restructuring will ultimately be made in Beijing. However, strong support from Shanghai municipal authorities is necessary to have any bargaining power in the capital. But local authorities have been unable to agree on some issues and some do not wish to take any responsibility for the project at all given the low esteem with which Beijing currently regards real estate projects.

Whether the Shanghai Centre's high profile is an asset or a liability in its negotiations is debatable. Chinese leaders recognize that not helping such a large, visible sign of multinational foreign investment would certainly send a chill down the spines of much of the foreign business community, and municipal officials like the technology and employment opportunities the Centre brings to the city. However, awarding concessions to Shanghai Centre would send every other foreign project in China knocking on Beijing's door for the same treatment. Thus, parties to the negotiations are keeping a tight lid on the terms. Despite the secrecy, however, Shanghai Centre is being closely watched as a sort of litmus test—for even though real estate projects occupy a distinct niche in the invest-

**The Bund as it appeared in its heydav, circa 1930-40.**

ment arena, the business community will likely view the outcome of the negotiations as indicative of the regime's attitude toward foreign investment in general.

### *Casting a finer net*

China's altered political and economic climate have not only forced Shanghai Centre to restructure its finances, but also to reevaluate its marketing strategy. According to Public Relations Director Patsy Whitcombe, the Centre's marketing strategies haven't changed significantly, though the targets of its promotional efforts have.

Advertising, which was launched worldwide in April 1989, stopped in June and resumed in January 1990. Though the message is the same—"Now, everything is possible," reflecting the high standards throughout the Centre—the audience is not. Trying to attract new business from overseas is not considered promising given the current political and economic climate in China. Therefore, for at least the first year of operations Shanghai Centre advertising will be aimed at companies already doing business with China.

The Centre's public relations campaign, likewise, aims to enhance the Centre's image among companies already active in China, stressing the strength and vision of the Centre's partners. Original plans involved the partners working with municipal officials to promote the city's image abroad, but these plans have been put on hold.

Sales representatives for the office, apartment, and retail spaces are focusing primarily on companies already in Shanghai, followed by those located in Beijing and elsewhere in China. Seacliff claims that about half the retail, office, and apartment space has been leased—among the companies that have booked office space are the Hong Kong and Shanghai Banking Corp. and Hewlett-Packard—and hopes to fill the rest by the end of the year. Since few new companies are moving to Shanghai, however, and those already there are sending fewer expats, the salespeople are finding a smaller—and more competitive—pond to fish from.

### *Carrying the weak links*

The Portman at Shanghai Centre, managed by the Peninsula Group and promoted separately from the rest of the Centre, is currently the soft spot in the project. According to Carol Goldsmith, marketing director for the hotel in North America, the market is hard to gauge. Goldsmith has obtained commitments from 29 North American tour operators for 1990, but these commitments are contingent on the operators being able to sell tours, and no one is reporting much activity for the spring. "Experts in the tourism business have been predicting that 1990 tourism levels in China will reach one-third to one-half of 1988 levels—that means 100,000-150,000 Americans. But it's still too early to say if this is an accurate estimate," Goldsmith says.

With the leisure travel market uncertain, and the meeting and incentive markets practically nonexistent (*see The CBR*, September-October 1989, p.42), the Portman, like virtually every other hotel in China, is trying to attract business travelers. The hotel is offering 50 percent off its rack rates for the corporate market through the end of June, so that regular room prices currently range from about $67-77 a night while suites range from $95-325. Off-season group rates of $50 per night have also been extended for groups through May.

According to Executive Vice President of Portman Overseas A.J. Robinson, there is also some concern about the apartment towers. "The number of hotels offering discounted long-term contracts makes it more difficult to market our apartment space, but considering everything, I think we are doing quite well. I'm also confident of our theater and exhibition hall, as these really distinguish us from other developments in the city. We're hoping to book the original Atlanta production of 'Driving Miss Daisy' in the theater for our grand opening this September."

### *Squeezing imports*

Aside from the credit crunch and general downturn in business, China's economic austerity program has created other difficulties for Shanghai Centre, the most significant of which affect the project's imports. In perhaps the most outstanding example, Shanghai Centre requested to import 30 Mercedes Benzes—as it claims a competitor did in 1987—for the Centre's taxi fleet. The luxury Benzes were denied up front, but with help from the Shanghai Municipal Foreign Economic Relations and Trade Commission (FERTC), Shanghai Centre was granted import licenses for 12 sedans and nine vans by the Ministry of Foreign Economic Relations and Trade (MOFERT) in Beijing.

Customs authorities, however, told Seacliff that the Centre could import only four of the 12 sedans on a duty-

## *Redefining Mass Recruiting*

**Although some foreigners may be dubious about the prognosis for Shanghai Centre, it apparently isn't a concern of many Shanghainese. An advertisement last September to select 200 technically qualified staff attracted 4,000 applicants, and recruitment in October for non-technically qualified staff yielded an astounding 25,000 applications.**

**Shanghai Centre staff spent nearly two weeks reviewing the 25,000 applications, and finally invited some 4,000 people for job and language interviews. A stadium was rented for five days to conduct the interviews, and 1,000 people out of the total 29,000 who applied in both categories were selected.**

**Once the final selections had been made, Shanghai Centre had to work with local labor authorities to get its future employees released and transferred from their work units. Not all efforts were successful; about 85 percent of the selected employees were transferred and passed a mandatory medical exam.**

**Since November, all Chinese staff have received training in their specific departments, in English, and in the Shanghai Centre's management philosophy. Shanghai Centre officials claim that none of their employees have had to spend working hours in political study sessions, and that morale is high. Having on average beaten out 28 competitors for their new positions, it's no wonder. —PB**

*It has become painfully clear that the initial feasibility studies conducted in 1985 could predict neither political instability nor economic retrenchment and the painful impact both would have upon Shanghai Centre.*

free basis (duties on auto imports are extremely high; *see The CBR*, November-December 1989, p.36). And the problems did not stop there. The Japanese suppliers of the four vehicles have refused to sell them due to onerous constraints under new State commodities inspection regulations, which require suppliers to provide two vehicles for inspection and crash testing for each model they intend to export to China. Seacliff has approached Shanghai FERTC and MOFERT on the issue, but it has not yet been resolved. In the meantime, the Centre is leasing autos from an existing fleet in the city.

### *Keeping their chins up*

Seacliff employees anxiously point out that they consider such difficulties temporary, and that they are in China for the long term. Says Mark Jared, marketing manager for the office and apartment towers: "China has gone through a lot of these economic retractions and companies should be prepared for this cycle...We look for distinguishing features to make Shanghai Centre more competitive [in this environment]."

And in many cases Shanghai Centre does have something unique to offer. Perhaps most important, BellSouth International has created a telecommunications network that enables tenants and guests throughout the Centre to undertake any business activity they would at home—such as sending faxes and telexes—while also providing such sophisticated services as voice mail and room-to-room electronic mail.

The hotel is supposedly the first foreign one to have sourced a large volume (over $1 million worth) of five-star quality furnishings and fixtures in China, and will also feature unusual artpieces—such as seventeenth century-style *zhi jing* brocade weaving—in its grand atrium and interior alcoves. The retail plaza will boast the city's largest discotheque, and the theater hopes to stage international productions not commonly seen in China.

The next few months will be tell-tale for determining visitor flow to the Centre and whether current projections are on target. There's a lot of anticipation, but, A.J. Robinson says, "I'm optimistic. We're open for business, and now, everything is possible." 完

上海

# Shanghai's Lure for High-Tech Investors

*Officials hope the city's economic and technological zones will be seedbeds for growth*

**Denis Fred Simon**

Shanghai has played a strategic role in modern China's industrial and technological development. Though the city has lost some of its predominance as China's main industrial center, by the end of the 1980s Shanghai still figured significantly in national industrial output, the central government's revenues, and total national exports. Per capita income, which equaled over ¥5,161 in 1988, was the highest throughout China. Moreover, the municipality posseses a comparatively strong science and technology (S&T) base, with 711 research institutes, 108 scientific and technological associations and over 55,000 S&T personnel, as well as 400,000 technicians. In addition, Shanghai is the site of three top-notch universities—Fudan, Jiaotong, and Shanghai S&T—which have helped create an active research and education environment.

Shanghai's industrial base also holds a comparatively strong position within China's overall industrial structure. In 1988 light industry (¥71.39 billion) accounted for approximately 8.0 percent of China's light-industrial output and heavy industry (¥58.17 billion) accounted for 6.4 percent of total heavy industrial output. Similarly, Shanghai's electronics industry, which, at ¥9.08 billion, accounted for about 15 percent of 1988's ¥60 billion national gross production value in the electronics sector, has performed well in product quality and diversity. Shanghai's consumer electronics are particularly strong, with the city accounting for approximately 20 percent of China's total TV production in 1988.

Photo courtesy of Denis Simon

**Workers at a company in the Caohejing zone inspect semiconductor components.**

These figures indicate that Shanghai is well-equipped to participate in the modernization of China's economy in general and high-technology industries in particular. They also obscure a number of fundamental weaknesses in Shanghai's economy, however. Plant and equipment are outdated, with about half of the equipment in Shanghai's industry dating from the 1930s and 1940s; links between research and development and production are poorly developed; management capabilities are inadequate; and overall product quality tends to be poor.

Shanghai's leaders view the development of modern, technologically advanced economic zones that will attract foreign investment and absorb foreign technology as an answer to these problems. Economic planners believe the zones will spur the local economy to stop relying on capital- and labor-intensive industries and begin developing more highly skilled industries, as well as the service sector. By marrying the strengths of Shanghai to those of the foreign corporate community, local officials hope to reestablish the city's prominence as China's leading technological, economic, and commercial center.

### *Magnets for foreign investment*

Building on the experiences of several of the newly industrialized economies of East Asia, including Taiwan and South Korea, Shanghai's

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leadership decided in the early 1980s to establish a number of development zones to attract foreign investment, in line with central development strategies (*see* box). Since then, the development of the Hongqiao, Minhang, and Caohejing zones has formed the cornerstone of the municipal government's efforts to improve the city's investment environment. Hongqiao has received much publicity, largely because of the high level of Japanese involvement there, but Minhang and Caohejing have also been steadily developing into strategically important investment sites for foreign firms from Hong Kong, the United States, Japan, and Western Europe.

After Beijing announced a 22-point program in October 1986 to promote foreign investment, Shanghai followed the central government's lead by announcing a campaign to make the city more hospitable to foreign investors. In preparation for the campaign, the city had launched the Caohejing microelectronics zone in September 1986, and it announced guidelines and preferential treatment for foreign-investment enterprises in the Minhang and Honqiao zones in March 1987.

*China's top planners have promoted ETDZs in the belief that a technologically advanced economy depends on spatial concentration.*

China's top economic and technological planners have promoted the creation of high-technology zones in the belief that a technologically advanced economy depends on spatial concentration—an approach that runs counter to Chinese industrial planning over the last three decades. In the past, China has discouraged concentration of facilities for reasons of national security. Concentration was viewed as feasible only where investment costs could remain low—in areas with an adequate technological infrastrucure, skilled labor, well-developed industrial sector, and suitable environmental conditions.

### *Minhang: the pioneer*

The Minhang Economic and Technological Development Zone (ETDZ) was established during the latter half of 1983—though it received formal State Council approval only in August 1986—and since 1983 Shanghai has invested an estimated ¥250 million in its development. Located on the upper reaches of the Huangpu River about 30 km southwest of downtown Shanghai, the area covers approximately 2.13 sq km and is administered by a China-Hong Kong joint venture called the Shanghai Minhang United Development Corp. Ltd. With ¥120 million in capital, the United Development Corp. has responsibility for developing the zone's infrastructure and building and selling industrial, residential, and other buildings. In addition to attracting potential foreign investors, it also is charged with recruiting local partners.

As of October 1989, 60 foreign-invested projects had been approved for operation in the Minhang zone, with a total investment of $140 million, while 32 projects, employing 7,100 people, had already begun operating. Of the 60, 36 projects fall into the official category "export-oriented," while 12 are considered to be "technologically advanced." In

## Why Choose an ETDZ?

The lion's share of US direct foreign investment in Shanghai has been centered in the Minhang and Caohejing Economic and Technological Development Zones (ETDZs). The zones, each managed by a Sino-foreign joint-venture management company, offer several advantages to foreign investors.

• **Preferential treatment.** Like the Special Economic Zones, the EDTZs offer a host of investment incentives ranging from tax reductions and exemptions to priority access to raw materials and credit. **Xerox Corp.**'s $30 million joint venture to produce and service copying machines began operating in 1987. A company official says a host of incentives helped lure Xerox to Minhang, including a five-year property tax exemption and an exemption from local income taxes until the end of 1995. Xerox is working to design and manufacture new copiers at the joint venture, fulfilling the principle objective of the ETDZs: to transfer new technology, skills, and management techniques to China.

• **Infrastructure and services.** When **Minnesota Mining and Manufacturing Corp. (3M)** established the first wholly foreign-owned enterprise in China, company officials selected Caohejing, thinking it would become one of the largest industrial areas around Shanghai. Further, space was immediately available for 3M to begin operations in 1985.

Shortly thereafter, **W.R. Grace** followed suit with its own wholly foreign-owned enterprise, established in 1986. After looking at various sites in and around Shanghai—most of which were dilapidated and lacked power hookups—Grace stumbled upon Minhang, where construction of buildings had been completed and zone-management organizations had been established. Says William Kinch, former executive vice president for operations at the joint venture: "The basic decision was to go with Minhang—it was the only place with telex, telephone, water, and sewage treatment in place—a modern-day industrial development zone." Other foreign observers have also noted Minhang's uninterrupted supply of electricity—a luxury anywhere in China.

• **Experienced management.** ETDZ management tends to be more capable than managers elsewhere and better equipped to understand what it takes to attract Sino-foreign joint ventures.

• **Proximity to other FIEs.** The concentration of relatively large numbers of FIEs in one area provides management with valuable experience in handling foreign companies' complaints. Companies can also sell among themselves and coordinate purchases and shipping to hold down costs. The social environment for expatriate staff is also a plus.

—Richard Brecher

1988, exports from firms in Minhang totaled $14.7 million, and they reached $13.1 million by mid-1989. Of the projects, 22—or 36.7 percent—are from Hong Kong; 17 (28.3 percent) are from the United States, and 10 (16.7 percent) are from Japan, but the United States ranks first in total investment value, with 49.6 percent. Hong Kong is second, with 17.6 percent, and Japan ranks third, with 16.7 percent. Interestingly, 56 percent of the total US investment in Shanghai—approximately $583.9 million at the end of 1988—was in the Minhang zone, according to the Minhang Development Office. US firms seem to prefer the zone because of the presence of other notable American firms, as well as relatively good management by the UDC. Investors include Shanghai Xerox Ltd., Shanghai Squibb Pharmaceuticals, Grace China Ltd., and Shanghai Ingersoll Rand Compressor Ltd.

Minhang offers several advantages as an investment site and was almost completely filled in just over two years. First, a highly specialized administrative apparatus has been put in place to help foreign firms. Approximately 21 Shanghai government offices are represented in Minhang, including a customs house to facilitate the passage of goods, equipment, and materials. Second, Minhang, where 14 percent of all Shanghai's joint ventures are located, is the only zone where all operating companies are joint ventures with some form of direct foreign investment, providing opportunities for savings through cooperative sourcing, shipping, and so on.

The most important draw for foreign investors in Minhang appears to be the infrastructure—including the presence of other well-known foreign-invested companies. For example, unlike the rest of Shanghai, companies operating in the Minhang zone do not face power outages or brownouts. In addition, as a result of

## Creating China's Silicon Valley

In the early 1980s, Shanghai and central-government leaders decided China needed to create small "Silicon Valleys" that would mirror the stunning successes of Route 128 in Massachusetts, Santa Clara County in California, and the Research Triangle in North Carolina. More recent emulations of the US models in Japan (Tsukuba Science Park), Taiwan (Hsinchu Science and Industry Park), and South Korea (Daeduk Science Town) also stimulated Chinese interest in high-tech centers. Chinese leaders believe these parks will become technological hothouses, stimulating local innovation and technological advance.

The zones are also intended to promote key priorities of China's Eighth Five-Year Plan (FYP, 1991-95) by introducing new, advanced technologies to upgrade exisiting industries; accelerating the development of "third wave" technologies, especially microelectronics, informatics, and biotechnology; developing service industries; and improving education and training to strengthen Shanghai's personnel base.

### *Three anchors*

Three characteristics seem to distinguish the high-technology districts China is seeking to emulate. First, successful high-technology firms in these locations have different requirements than do more traditional manufacturing firms, being less dependent on heavy imports of raw materials and tending to be smaller and more adaptable. These companies are characterized by distinctly new forms of corporate organization and entrepreneurial behavior. Second, most high-technology sites tend to prosper in close proximity to universities, government research institutes, and mature industries. Finally, they require a well-developed infrastructure, including adequate financial, personnel, and communications resources. Companies in high-technology zones take advantage of the spatial concentration of certain industries and support systems in one well-defined area.

High-technology firms do not require proximity to natural resources and energy; they have a high degree of locational flexibility. They do look for highly skilled workers and scientific and technical staff, however, and they tend to look for sites with ready access to cultural and educational resources.

In summer 1986, the former Ministry of Electronics Industry formalized the concept of a Chinese "Silicon Valley" and decided to take advantage of well-developed coastal areas to set up four major electronics research and development (R&D) and manufacturing bases, based on the recognition that China had neither the financial nor the technological means to set up high-technology centers from scratch. These bases were to form the backbone for China's future high-technology development.

### *Choosing 'technological hothouses'*

With these considerations in mind, China's leadership engaged in a lively debate in 1983-85 over designation of potential sites, with the Beijing/Tianjin and Nanjing/Shanghai areas as the top contenders. Among the other sites considered was Shenzhen, because of its many newly established electronics manufacturing facilities as well as its high level of foreign investment, as well as proximity to Hong Kong and Guangzhou. Ultimately the four bases were established in Beijing, Shanghai, Jiangsu, and Guangdong.

The four sites have distinct roles to play in China's electronics-sector development. Beijing, as the workplace for over one-fourth of the S&T personnel in the electronics and information industries and a center for research, is charged with producing consumer electronics products as well as developing advanced electronics technologies such as mainframe computers. Jiangsu, with Wuxi and Nanjing as its high-tech bases, will establish six electronics "conglomerate companies" *(jituan gongsi)* to comprehensively expand the role of electronics in the provinces's economy. Guangdong will establish itself as a major export center for electronics, relying mostly on consumer electonics. Conglomerates will be established in Guangzhou, Shenthe State Council's sanctioning of the zone, foreign investors are eligible for the complete range of tax incentives and preferences provided to other foreign-invested companies in China, as well as several benefits particular to Shanghai (*see* box). Finally, the zone seems to be constantly undergoing improvements. These factors may explain why 21 percent of the Minhang firms have already increased their initial capital investments, and many of the firms in operation have already become profitable.

### *Mobilizing high-tech resources*

The Caohejing ETDZ was created in 1984 to mobilize Shanghai's research and production capabilities for high-technology projects and is being developed by a Hong Kong-based joint venture, the Shanghai Caohejing Hi-Tech Park Development Corp., though municipal officials have been very active in screening proposed projects. Municipal officials have generally strongly opposed investment in the park by non-high-tech companies. Initial investment was approximately ¥100 million, the majority of which the central government lent to the Shanghai municipality. Key zone participants include the CAS Institute of Metallurgy (IOM), the Shanghai Components Factory No. 5, and the Shanghai Radio Factory No. 14. Shanghai authorities assigned a key role in developing the Caohejing zone to foreign companies through both technology transfer and investment, and 16 joint ventures have been approved to date. Companies that have set up operations in the zone include BTM Corp. of Belgium and Philips of Holland.

A 1988 decision to expand Caohejing's scope to include a broader range of industries slightly downgraded the importance of microelectonics, but the long-term goals were not changed. These goals include developing and manufactur-

zhen, Zhuhai, Shantou, Foshan, and Jiangmen.

As for Shanghai, the central plan decided to emphasize microelectronics to supply industrial components to the computer, communications, and consumer electronics industries. Another major objective of Shanghai's high-tech zone is to ensure the widespread application of electronics technology for transforming traditional industries.

### *Fighting to give away control*

In late 1984, Shanghai officials selected a specific site for a high-technology zone concentrating on microelectronics in an area called Caohejing. The Caohejing project represented Shanghai's most important effort to create an advanced semiconductor base. Moreover, Shanghai officials conceived the Caohejing project as a basically national project. Thus, when financial and other support from the central government did not materialize, local officials were chagrined.

After more than a year of contention about control over the project, the State Council apparently decided to assume responsibility for sanctioning Caohejing and coordinating it with other aspects of China's overall microelectronics development, officially classifying it as a national project in October 1986. This classification had important implications, not only for obtaining funding but for developing a new cadre of high-technology specialists in Shanghai. In addition, Shanghai's prominence guarantees expanded access to advanced foreign technology. As a national project, Caohejing also became eligible for preferential tax treatment, and taxes dropped from about 26.4 percent before State Council approval to roughly 10 percent after certification.

### *Critical weaknesses*

The Caohejing project brought to the surface a number of the structural weaknesses in China's overall management of high-technology development. As an effort to gain experience in cooperation among different units, Caohejing represents a step forward in China's attempts to create a modern, technology-based economy. Nonetheless, it is clear that Caohejing's goals will not be easily accomplished, due to a combination of resource shortages and inconsistency in decision-making. Shanghai may possess one of the strongest scientific and production bases in China for research and development, but it still lacks sufficient supplies of power, a well-developed communications network, and the continuous supply of competent personnel needed to manufacture large volumes of sophisticated components.

More important, initially the Caohejing project revealed that the Shanghai leadership had only a very superficial understanding of high-technology industry and did not know what was required to stimulate its development. Microelectronics development generally requires a strong competitive market for domestic firms and significant R&D support, and this environment must be structured within a coherent strategy with precise goals. While the situation has begun to improve under Mayor Zhu Rongji, Shanghai still lacks most of these elements.

One problem is that China misconceived the experience of California's Silicon Valley—which was not planned but created by the competitive market it operates within. Governments may intervene, to absorb the start-up costs, for example, as they have done in Taiwan, South Korea, and Japan, but ultimately the responsibility for maintaining a competitive edge must fall to the firms themselves.

Organizationally, Caohejing also highlighted the difficulties inherent in developing and managing a project in China that requires both horizontal as well as vertical coordination. Vertical barriers between individual ministries require that all decisions percolate up to the top of organizations before a decision can be made to cooperate at a horizontal level. This tends to work against effective policy formulation and implementation. Viewed from this perspective, the true success of Caohejing is manifested in what it has achieved under China's multiple system reforms. Unfortunately, if those reforms are significantly delayed and organizational efficiency and collaboration are not expanded, future high-technology intiatives may suffer. This is a sobering thought in view of the newly announced science and technology targets in Shanghai's Eighth FYP as well as the tremendous effort being made daily by dedicated scientists and engineers who are working to close the gap between China and developed nations.—DFS ing integrated circuits, computers, industrial robots, biotechnology, and fiber optics.

As of early 1990, approximately 35 projects had been approved for operation in the park, with about $200 million in total investment. Expanded from 170 hectares (ha) in 1984 to 5 km in 1986, Caohejing Park encompasses four sections. Section one is focused on instrumentation and electronics and includes such firms as Foxboro (US) and Printronics (Australia), while section two, which is now 80 percent occupied, focuses primarily on microelectronics. Two major microelectronics projects have been set up in section two. One is a partnership between Shanghai Bell Telephone Equipment Manufacturing (with $54 million in investment) and Shanghai Radio Factory No. 14, which will produce MOS devices for the Shanghai Bell Telephone 1240s switch. The other project, with $51 million in investment, involves Philips, which will produce integrated circuits for television sets. Section three will focus on biotechnology, and section four's concentration has not been determined.

The BTM and Philips investments represent some of the first direct foreign participation in the Shanghai plan to develop strong capabilities for the design and manufacture of large-scale integrated circuits. This plan includes stimulating expanded imports of foreign technology as well as improving the links between R&D and production. The BTM venture, known as the Belling Microelectronics Manufacturing Co., involves a joint venture between Bell Telephone Manufacturing SA of Belgium and Shanghai Radio Factory No. 14—one of the leading semiconductor facilities in China. Its aim is to produce customized integrated circuits as part of a localization scheme for the 1240s digital telecommunications switch, which is currently being manufactured and installed in Shanghai by the Shanghai Bell Telephone Equipment Manufacturing Co.

The venture with Philips represents a potentially even greater breakthrough for Shanghai's microelectronics industry. As part of the overall strategy for developing the Caohejing zone, Shanghai authorities had been trying to attract a number of foreign electronics firms to set up a modern integrated circuit production facility. While several Japanese and US firms expressed some interest, only Philips was willing to make a firm commitment. As part of its joint venture with Shanghai Radio Factory No. 7 and Shanghai No. 5 Components Factory, Philips agreed to transfer 2.4 micron integrated circuit technology, primarily for use in the manufacture of television sets. Both the BTM and Philips ventures will work with Shanghai Radio Factory No. 19 for assembly, packaging, and testing of chips.

### *Hongqiao: Production and housing*

The Hongqiao ETDZ was established in 1983 as part of an effort to build up the area surrounding Shanghai's Hongqiao International Airport. Located about 6.5 km. west of Shanghai's center, the 65.2 ha. Hongqiao zone combines production facilities for foreign-invested firms with housing and hotels for foreign tourists and consulate personnel as well as overseas Chinese. Its centerpiece is the 40-story Shanghai International Trade Center building, constructed with Chinese and Japanese investment. The zone has been developed and managed by the Shanghai Hongqiao United Development Co. Ltd., a Sino-foreign joint venture, and as of mid-1989 was 60 percent developed, with 16 formally approved projects and 11 firms in operation worth $304 million, of which $140 million is direct foreign investment. The firms employ more than 3,000 people.

Perhaps the most important feature of the Hongqiao zone is that it was the first area in China to lease land through international bidding. In July 1988, Sun Enterprises Ltd. of Japan paid approximately $28.08 million for a maximum 50-year lease on a 129 ha plot. Similar bids will be offered in the newly opened Pudong

## *Pudong: Shanghai's Model City*

Now that the Minhang, Hongqiao, and Caohejing zones are firmly established, Shanghai officials are devoting their attention to developing a new zone—the Pudong New Area—designed to ease congestion in greater Shanghai by housing 1.5 million people and gathering related industries into specialized districts.

Plans are to develop 150 sq km, with another 50 sq km reserved for future use. Pudong will concentrate industries into five distinct districts:

- **Waigaoqiao district:** will encompass a harbor on the Yangtze to eventually include 44 berths, as well as petrochemical and energy industries, warehouses, and an export-processing area.
- **Qinningsi district**: will emphasize shipbuilding and non-polluting industries.
- **Liujiazui district**: is planned as an extension of the Bund and will contain administrative, financial, and trade offices.
- **Huamu district**: will serve as the zone's residential area and provide research, education, and cultural facilities.
- **Zhoujiadu district:** will house metallurgical, construction materials, and other industries.

Pudong's planners expect the zone to begin taking shape around the turn of the century, though they hope to have the first phase, encompassing basic infrastructure, complete by 1995. According to planners' blueprints for the area, Pudong will be connected to the western part of the city (including a direct link to the Bund) by both bridges and tunnels, and will eventually include a new airport.

Development officials are currently seeking foreign involvement from both the private and multilateral sectors for consulting and financial assistance. They estimate they will need at least ¥5 billion through 1995 to complete the first phase of infrastructure development. Negotiations have been concluded for a $100 million loan from the Asian Development Bank to build a bridge crossing the Huangpu, and the Chinese are awaiting final ADB approval of the loan. Shanghai officials have now also begun introducing the project to the World Bank. —PB

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ETDZ on the east side of the Huangpu River (*see* p. 48).

### *Unrealistic expectations?*

Foreign investment in the ETDZs has suffered a setback since the Tiananmen suppression, and several potential investors indicated in conversations in September and December 1989 that they were reconsidering investment plans. Even before Tiananmen, however, foreign-investment firms in the special zones were not living up to official expectations for export levels. Initial feasibility studies for the 60 approved projects in the Minhang zone suggested that many could attain an 80 percent export level during the first three years of operation—but this goal remains distant. Given the focus of many joint ventures on the domestic market, this expectation was probably unrealistic. Still, zone officials hope to continue attracting export-oriented companies with low wages, averaging ¥250-300 (not including bonuses) and good administrative and infrastructural support.

High imports of components and raw materials by factories in the zones have also presented a problem, exacerbated by the skyrocketing prices of domestic raw materials and China's continuing credit squeeze. Xerox Corp., for example, has begun to encounter significant problems: in 1989, it is projected that there will be a 2,000-unit surplus of unsold stock, as many Chinese organizations do not have the money for purchases.

Finally, Chinese officials have expressed unease with foreign partners' control over the quantity and destination of exports. They believe that foreign partners, in their zeal to serve the Chinese domestic market, are not always willing to make exports a high priority. Minhang officials seem to feel that Hong Kong firms are a particular problem, because they tend to have almost total control over export prices.

Overall, Shanghai's ETDZs have been successful in attracting foreign firms and providing better operating conditions than elsewhere in Shanghai. Moreover, the mayor's office has shown a high degree of commitment, best reflected in the decision to set up a "special office for foreign investment" (*see* p. 30). The Shanghai zones have helped establish the city's credibility in expanding foreign investment and importing technology. Compared with some of their earlier counterparts in Taiwan and South Korea, the Shanghai ETDZs are not as closed or tightly regulated, which has helped minimize the potential for developing into enclaves with little to offer the domestic economy. On the contrary, the ETDZs seem to be attractive as employment sites and are expanding their local sourcing and sub-contracting relationships—good signs for the future.

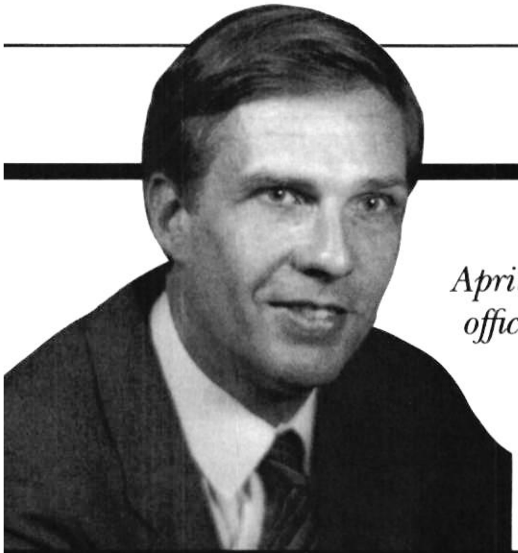
*The firms operating in the zones have not been sheltered from the larger problems facing the local economy.*

At the same time, the firms operating in the zones have not been sheltered from the larger problems facing the local economy. Squibb's initial experiences in Shanghai were extremely troublesome, for example, when its joint-venture partner disappeared as a result of bureaucratic reforms in the municipal government's industrial bureaus. In addition, it seemed that little was being done to protect its intellectual property interests when one or two of its products were copied by local factories. High-level interventions eventually resolved these problems, and Squibb has now become one of the successful firms in the Minhang zone—recently receiving Food and Drug Administration approval to export tetracycline to the United States. Nevertheless, foreign investors are still faced with the problem of operating in a scarcity economy, and many foreign-invested firms remain wary about their continued ability to sell products and obtain supplies.

The problems of the Caohejing zone may be particularly difficult, as many foreign firms, including those from the United States, remain leery of trying to set up a high-technology facility in Shanghai. As traditional unilateral technology transfer is increasingly replaced by bilateral transfer—in which both participating countries have some technological innovation to offer—China in general and Shanghai in particular will find that the degree of sophistication of the scientific and technological base will become more important in attracting foreign investment and technology. Caohejing clearly has some advantages, as its links with local universities and research institutes are being strengthened. Nonetheless, the long-term attraction of Caohejing as well as other similar zones in China will come from continuous availability of qualified technicians and engineers, as well as modern managers. For this reason, both the foreign business community and Shanghai authorities would do well to set aside funding and create training opportunities to ensure that the personnel requirements of the future will be met.

Photo courtesy of Denis Simon

**The Shanghai Radio Factory No. 19 works on assembly, packaging, and testing of computer chips for BTM and Philips joint ventures.**



*Winston Lord served as US ambassador to China from 1986 until April 1989. A former State Department and National Security Council official, he accompanied Henry Kissinger on the groundbreaking 1971 trip to China and throughout the 1970s worked to bring about normalized political relations with the PRC. In February, he spoke with CBR Editor Sharon E. Ruwart about President Bush's current China policy and how he would like to see it changed.*

# Seeking a Nuanced, Balanced China Policy

**CBR**: *You supported President Bush's China policy until the December mission to Beijing by General Scowcroft. Why did that change your mind?*

**Lord:** I believe in maintaining some contact with the Chinese, even as we sustain our indignation over last spring and what has been happening since. But I felt both the substance and the symbolism of the Scowcroft mission was ill-advised—it tended to align us symbolically with the regime and dismayed the moderates in China and the students here. So I was very upset by the trip; I felt it was a unilateral gesture that was more than was required to maintain a business-like relationship. And then of course my concern was greatly deepened by revelation of the prior July trip by Scowcroft.

**CBR**: *What was the intention and the effect of the July trip?*

**Lord**: The administration says that Scowcroft was there to convey American concern and distress over the events in June. Taking the administration at its word, the December trip becomes even more unwise in my view, because if [Scowcroft] conveys concern about the situation in China in July, and then it gets worse for five months—as I believe it did—and then he goes back again, it reinforces the regime's view that they can practice repression at home without entailing any costs abroad.

**CBR**: *Do you think the July trip was a positive way to achieve the administration's aims?*

**Lord**: With all due respect, I do not. I think to go at all, secretly or publicly, within a few weeks after the massacre was totally inappropriate. Tough messages could be sent through our ambassador or through their ambassador in Washington as well as publicly by the president and others. The very symbolism of sending a high-level emissary to the Middle Kingdom speaks for itself in the eyes of all Chinese in China and abroad.

**CBR**: *How should US-China relations be conducted right now?*

**Lord:** We need to follow a nuanced, balanced policy that makes clear that we have not forgotten the courageous, idealistic, and entirely nonviolent demonstrations last spring, and that we continue to regret what is happening in China. At the same time, we should maintain a business-like dialogue on international and other issues without the tawdry symbolism of high-level vists and inappropriate toasts. Thus we should continue talking, through our ambassadors and in other international forums, about such issues as missile proliferation, Cambodia, Korea, etc.

Private businesspeople should make decisions essentially on economic grounds. I think that Chinese economic reforms are going backwards, and therefore that many businesspeople are correctly putting off new investment even as they don't pull out, which is also correct.

We should maintain cultural and academic exchange programs wherever possible and where they can be productive, but under present conditions it's difficult to see the value [of these exchanges] when our Chinese interlocutors cannot speak freely. We should continue to suspend high-profile military cooperation for symbolic reasons. In terms of economic programs outside the private sector, I think it's premature, so long as the situation doesn't get worse in China, to roll back elements like MFN [Most-Favored Nation status] or the levels of civilian technology we have been exporting. But it's equally inappropiate, unless the situation gets better, to liberalize technology exports and provide government aid.

Finally, with respect to China's relationship to the international economic community—for example, accession to the GATT or loans from multilateral institutions—these should depend on China's economic progress. The postponement and rollback of some reforms, the renewed emphasis on central planning instead of the market—all these factors suggest that there should be delay in some of the multilateral activities.

**CBR:** *What about the proposed humanitarian loans from the World Bank?*

**Lord:** As I understand it, one loan has to do with earthquake relief—and it's difficult to be against helping earthquake victims. But I do think World Bank loans should be primarily based on economic performance, and as I've said, that suggests continued postponement of resuming programs.

The problem is that while some individual steps—like some very modest humanitarian loans—might make sense, they are part of the general pattern that includes high-level visits, a veto of congressional legislation, and unilateral lifting of sanctions. This pattern of unrequited moves by us makes even otherwise laudable individual steps less desirable, because it sends the message that we are more concerned with relationships with the leaders in Beijing than we are about the future of China, as represented by the vast majority of Chinese citizens in China and overseas.

**CBR:** *Symbolism is one of your constant themes; do you think perhaps some of those making US-China policy don't fully appreciate the special significance of symbols and gestures in Chinese culture?*

**Lord:** It's true that symbolism has particular importance in dealing with China, but I'm talking about issues that are more universal. I'm very concerned about what to me is a clear double standard between our approach to China on the one hand and Eastern Europe and the Soviet Union on the other. Does anyone really believe that if Gorbachev ordered the killing of innocents in Red Square, within a few weeks the president would send his national security adviser on a secret trip? We have heard very eloquent rhetoric from the president, the secretary of State, and others about the aspirations of Eastern Europeans, and what a wonderful year 1989 was. But we hear very little indeed—if anything at all—about the aspirations of the Chinese people. This is a very unfortunate double standard, not only in terms of our principles and our human rights objectives, but on pragmatic national interest grounds. Our paying attention to people who will not be around for more than a few years is angering and dismaying those who will be in charge of China's future.

**CBR:** *Since Congress failed to override President Bush's veto of the Pelosi bill [legally extending the stay of many Chinese studying in the United States], China policy has become a partisan political issue for the first time in many years. How do you think this might affect the conduct of US policy toward China?*

**Lord:** First of all, it's not party polarization—I think it's more Congress and the American people on one side and the administration and a few China experts on the other. Nevertheless, I agree that there is a very intense debate on China policy now, for the first time since we opened up in 1971. I think that's very unfortunate. It is above all the actions of Chinese leaders since last spring that has stirred this debate, but I think this administration by unfortunate symbolism and unilateral gestures has added fuel to the debate.

**CBR:** *What will be the impact of this disagreement on US policy?*

**Lord:** Well, I would think and hope that the president will heed the voices reflected in the debate, and the overwhelming votes against him. He managed to get less than 12 percent of the Congress to go with him in sustaining the veto of the Pelosi bill, and most of those who voted with him did so out of loyalty, not because they liked his China policy. So even though the president won on that particular vote, I think he would draw the conclusion, if only on political grounds, that he's got to pursue a more balanced policy. I would think also that he could use [the opposition] to persuade the Chinese to ease the repression of their people. And even though I disagree with [the president], I respect his motives and his courage politically—but he [vetoed the bill] gambling the Chinese would respond in a meaningful way. They haven't so far.

Finally, I think that the mood during the Pelosi bill debate will probably strengthen the security of Chinese students and others here because the administration has now said it will not force anyone go back against their will. This is different from an earlier formulation along the lines of "[students need not return] until the situation in China is safe."

**CBR:** *Under what circumstances can you see US-China relations returning to normal?*

**Lord:** There are two issues here: one, the longer run, which I think will only be a few years, when a more moderate pragmatic and humane regime will be in place in China. At that point, I would hope to fully resume the kinds of cooperative programs and productive dialogue that we had until last spring. But we have a practical problem: what do we do between now and that more hopeful day? I think that we should maintain a workmanlike relationship, avoiding unfortunate symbolism and pursuing the variegated policy I've described. To the extent that the current regime eases repression in China, we should be prepared to respond in kind. It's impossible to spell out specific steps and countersteps to be taken, but certainly if they make meaningful moves—which they have not done so far—then this would justify some easing of the US stance. Conversely, if they slide further backward, then I think we should temper our stance.

**CBR:** *You've said that in view of China's increasingly "ham-handed approach to Hong Kong," the United States should "put Hong Kong on the agenda with Beijing." What exactly should the United States do?*

**Lord:** We have a major interest in Hong Kong beyond our humanitarian concern for the people there—we have a huge financial stake, and an interest in stability in East Asia. The British, for obvious historical reasons, should continue to take the lead with Beijing—and I want to emphasize the importance of working closely with them and not complicating their very difficult and delicate task.

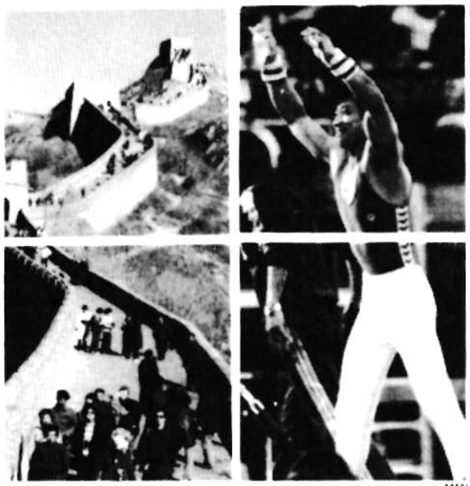
Having said that, I think we can and should make clear to the Chinese that we have a great interest in the future of Hong Kong, and that the agreement the Chinese and the British reached should be carried out in the full spirit as well as the letter. At least for the time being, our expression should be mostly of a general nature—emphatic, but avoiding tactical details that would complicate, for example, the British negotiations on the Basic Law. I also think we should step up expressions of our level of concern not only because of the events of last spring but also because of the very rough posture Beijing has taken versus Hong Kong on many issues in recent months.

**CBR:** *Since December, you have actively publicized your disagreements with the administration's actions toward China. Do you think you will have any influence on future China policy?*

**Lord:** I certainly don't want to inflate my importance. I was able to support the administration for several months last spring. I was reluctant, as a public servant, as someone who's served Democrats and Republicans, who admires President Bush and applauds most of his foreign policy, and as a former ambassador to come out with criticism of the administration. But these hesitations were swept aside by my conviction that our policy was really becoming unbalanced and unwise.

I've worked for this relationship for 20 years, and I thought that perhaps the fact that I have some credentials concerning China—and am someone who is known to be worried about economics and geopolitics as well as human rights—that I might lend a certain credibility to the critics of the administration, who tend on the whole to be foreign-policy generalists, human rights activists, or in some cases actively hostile to good relations with China.

Most of the experts, whether other colleagues I've worked with in the government or members of academic think tanks, have either sided with the adminstration or remained quiet, so I thought it was important for someone with my background to come out publicly [in opposition]. 完



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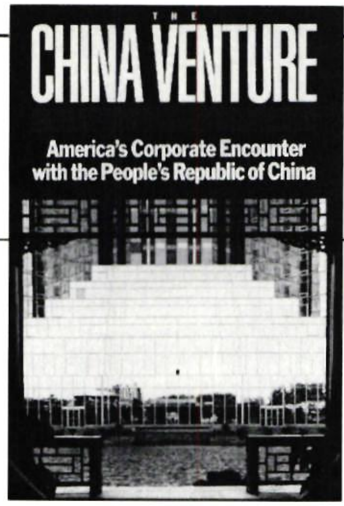
# 书刊介绍 Bookshelf




## *The China Venture*

### *America's Corporate Encounter with the People's Republic of China*

*By Christopher Engholm. Glenview, IL: Scott, Foresman & Co., 1989. 435 pp. $24.95 hardcover*

US companies developing strategies for China will find this book offers a useful and generally accurate picture of Chinas business environment. Researched and written before 1989's political and economic upheaval, some of the author's observations are dated, yet his guidance to readers stands up remarkably well.

Engholm begins each chapter with background and leads up to the current environment, skilfully balancing historical information and practical business advice. For example, he devotes an entire chapter to chronicling the fluctations of joint-venture development in China, beginning in 1979 and ending with the 1986 improvements and subsequent increase in foreign investment. This discussion highlights an important point for foreign companies to bear in mind—that though China's investment environment is fraught with problems, it is not static, and improvements can be made in response to investor complaints.

The next chapter, which deals with establishing a joint venture, includes valuable guidance on partner selection and negotiations. Engholm goes beyond the usual—though useful—advice on contractual issues to describe the expectations of Chinese entering into a joint venture.

Other chapters provide overviews of Chinese markets and how to penetrate them, China's business bureaucracy, enterprise management, and technological capabilities. The final chapter outlines formulas for running a successful business venture in China.

Throughout the chapters appear accounts of foreign companies' joint-venture experiences, which Engholm compiled from interviews and survey questionnaires. However, since he received questionnaire responses from just 39 American companies, some of his generalizations seem shaky, and a few of his observations are superficial. For example, he cites ITT Belgium's Shanghai joint venture as a good example of successful phased-in manufacturing, glossing over the difficulties of establishing any high-tech venture in China—this one in particular.

This lack of depth is manifest elsewhere as well. The first chapter's discussion of market opportunities, for instance, is far too brief. More important, his analysis of countertrade options fails to acknowledge that the fundamental difficulties of making successful countertrade arrangements have generally steered companies away from them.

Despite these shortcomings, Engholm offers much good information that will help companies develop both a better understanding of China and better strategies for succeeding there.

—Kelly Shea

## *The Chinese Mind Game: The Best-Kept Trade Secrets of the East*

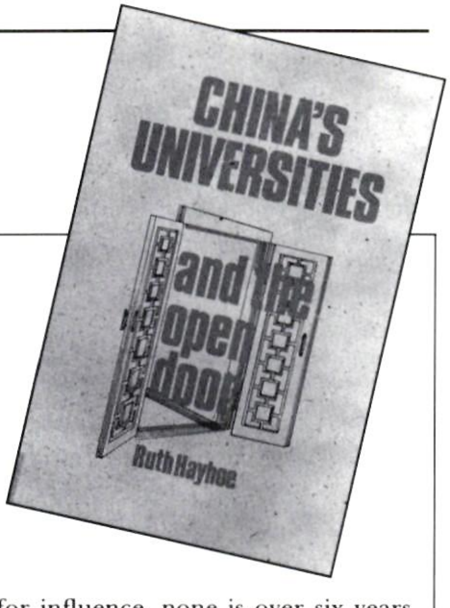
*By Chin-Ning Chu. Beaverton, OR: AMC Publishing, 1988. 261 pp. $19.95 softcover*

Chin-Ning Chu's somewhat generalized, impressionistic account of Asian cultural traits and business practices is meant to help Western businesspeople understand how to operate in different cultural contexts. The book's most significant point is the emphasis on the importance for Westerners of learning Asian languages to facilitate business relations. Her explanations of various cultural characteristics are less useful, since they tend to reinforce stereotypes rather than illuminate them.

The first of the book's 10 chapters discusses the importance of language in business negotiations—hardly an original concept, but Chu has some interesting insights into how each culture's use of language influences its attitudes toward commerce. In the second and third chapters, Chu traces the historical roots of East-West prejudices, and offers analyses of Asian business behavior from a cultural perspective. She concludes that while Asian peoples have a common history of endured repression, they nevertheless retain distinctive cultural characteristics: she contends, for instance, that Chinese are indecisive and non-committed, while Japanese are obedient, disciplined, and highly committed to the family.

Chapters six through nine, which explain ancient Chinese military strategies, will have the most appeal for businesspeople anxious to pick up the "secrets" of successful business maneuvering in Asia. Chu presents these strategies in simplified form, giving the impression that if you master them you will succeed in negotiations. Read carefully and apply these lessons with discretion.

The last chapter, which advises American firms on how to penetrate Asian markets, is the most impressionistic part of the book. Unfortunately and a bit surprisingly, given her stress on the importance of mutual understanding, Chu emphasizes a rather confrontational approach here. By failing to give equal weight not only to cooperative tradi-




## *China's Universities and the Open Door*

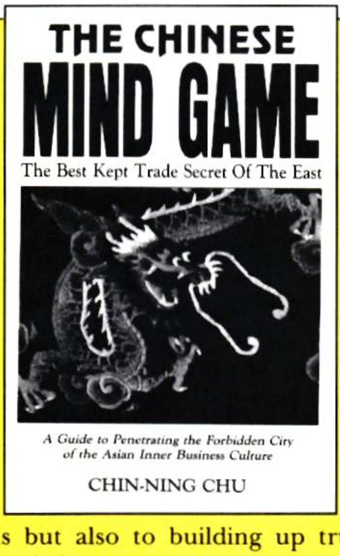
*By Ruth Hayhoe. New York, NY: M.E. Sharpe Inc., 1989. 249 pp. $37.50 hardcover.*

Published shortly before June 1989, Ruth Hayhoe's book makes a strong connection between China's political struggle and the reform of its educational system. Her argument that the education system has a large impact on China's overall domestic policies is undercut, however, by incomplete data and a weak conclusion.

Hayhoe begins with an account of how China's educational system has developed, emphasizing that ability to adapt education to cultural, political, and economic needs will be crucial to the long-term success of China's open economic policy and modernization. Although her arguments are well documented and cite a variety of respected Chinese sources, she overemphasizes the significance of China's educational system on development and reform by ignoring other critical factors. Also, she draws an inappropriate parallel between Chinese and European attempts at educational reform, an analogy that glosses over profound cultural differences.

Subsequent chapters examine the interrelationships between Chinese educational and social reforms, as well the the influence of the outside world on Chinese students and educational institutions. Arguing that outside influences are strong indeed, Hayhoe offers various statistical tables showing the numbers of Chinese students studying in Japan, Britain, Canada, France, the United States, and Germany. This interesting information is unfortunately incomplete, with some statistics ranging from 1978 only up to 1984, and others showing data for 1983 only. Her discussion of the effects of institutional educational exchanges similarly suffers from insufficient data; of the 10 programs she analyzes for influence, none is over six years old, so her generalizations are hard to accept.

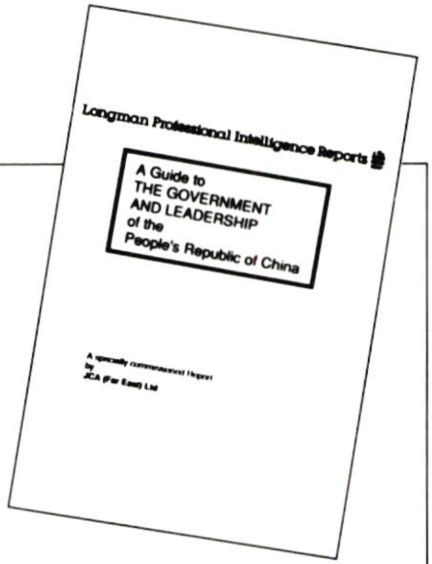
By far the most important information in this book is Hayhoe's account of the history of World Bank educational programs in China, as well as a report on eight current projects and how they influence educational reforms. This detailed, thoroughly analyzed information is available nowhere else outside the Bank and will be of particular interest to academics involved in exchange programs with China. —KES




tions but also to building up trust through long-term commercial and personal relationships, she has not done as much as she could have to eradicate stereotypes and bridge the gap between East and West.

—Louise Lee, Jennifer Little

## *A Guide to the Government and Leadership of the People's Republic of China*



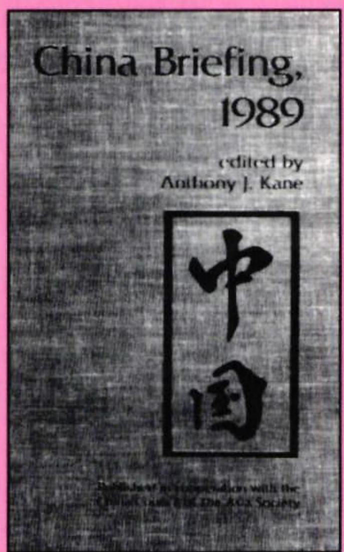

*Hong Kong: Longman Group (Far East) Ltd., 1989. 59 pp. $145 hardcover*

This useful book describes the functions of and relationships between the State and Communist Party organizations of China's government, focusing on the top levels, from the State Council down to the central ministries and commissions. Brief descriptions of each organization include information on its origins and evolution along with the names of its leaders. The second appendix, which includes the addresses and telephone numbers of the ministries, could be helpful to companies in need of the highest type of assistance, but would not help a company identify, for example, the department or person to contact to pursue more specific business goals.

One surprising omission is a description of the Party's Central Military Affairs Commission, which was the focus of much political wrangling late last year. Like most of the other Longman books, this volume fulfills its role as a basic reference guide on China's government. —Joel Greene

## *China Briefing 1989*

*Edited by Anthony J. Kane. Boulder, CO: Westview Press in cooperation with the China Council of the Asia Society, 1989. 159 pp. $29.85 hardcover, $14.85 softcover*




This is the latest volume in the Asia Society's annual effort to synopsize the previous year's significant economic, political, and cultural trends in China. This edition, which looks back at 1988, contains essays by noted China experts on political reform, foreign policy conflicts, US-China relations, international influences on Chinese art and culture, and Taiwan's transition from the Chiang dynasty to a more democratic system.

Although the timing of this edition, which went to press in spring 1989, prevented the authors from analyzing how events of 1988 could have led to the 1989 student demonstrations and subsequent crackdown, the essays nevertheless illuminate many of the broad trends underlying modern Chinese life, and readers familiar with the nature of the student protests will find the essays of interest even in hindsight.

Like the previous volumes, this book contains a chronology of events in China in 1988, a bibliography of suggested readings, and a glossary of terms and people. —KES

# 中外貿易 China Business

**Joel Greene**

The following tables contain recent press reports of business contracts and negotiations exclusive of those listed in previous issues. For the most part, the accuracy of these reports is not independently confirmed by *The CBR*. Contracts denominated in foreign currencies are converted into US dollars at the most recent monthly average rate quoted in *International Financial Statistics (IMF)*.

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
January 15, 1990

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

## Advertising and Public Relations

### *Other*

**Samsung Co. Ltd. (South Korea)/Asian Games Organizing Committee, Beijing**
Signed Asian Games sponsorship contract. $2 million. 11/89.

## Agricultural Commodities

### *China's Imports*

**PGG International Ltd. (New Zealand)/China National Animal Breedingstock Import and Export Corp.**
Sold 520 Corredale sheep (20 rams and 500 ewes). $280,000. 1/90.

**US**
Sold 300,000 tonnes wheat at subsidized price for May delivery. 1/90.

**Webster Ltd. (Australia)/China National Animal Breedingstock Import and Export Corp.**
Sold 525 Comback sheep. 11/89.

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.

## Agricultural Technology

### *China's Imports*

**Entercool Food Technology Ltd. (Denmark)/CTIEC and Xingtai, Hebei**
Sold chickens and breeding technology and equipment. $4 million. 1/90.

### *China's Investments Abroad*

**San Jose de Coquimbo Fisheries Corp. (Chile)/China Rural Trust and Investment Corp.**
Sold 25.6% share. $18.6 million. 12/89.

## Banking and Finance

### *China's Imports*

**Philips (Hong Kong) Ltd., subsidiary of Philips NV (Netherlands)/People's Construction Bank, Shenzhen branch**
Sold 15 automated teller machines. $1 million. 12/89.

### *Other*

**Spain**
Approved 15 year, 2-3% interest loan in the form of export credits. $30.3 million. 1/90.

**The World Bank/Investment Bank of China, Tianjin branch**
Released loan for upgrading Tianjin industry. $150 million. 1/90.

**Japan**
Provided grant to Beijing TV station, Shanghai No. 1 People's Hospital, and Ningxia Hui Autonomous Region. $35.23 million (J¥5 billion). 12/89.

**FRG/Shanghai**
Released $230 loan to partially support Siemens AG's contract to undertake construction of Shanghai's subway. 11/89.

**Wright Investors' Service (US)**
Negotiating with Chinese bank officials to establish investment fund for financing industrial development. 11/89.

## Chemicals and Petrochemicals

### *China's Imports*

**Zimmer Co. (FRG)/Sida Chemical Fiber Co., Dalian**
Sold spinning and weaving equipment and polyamide fibers. 12/89.

**John Cooperative Co. Ltd. (Nigeria)/Shenyang Chemical Industrial Co.**
Sold smoked natural rubber. $1.74 million. 11/89.

### *Investments in China*

**Bothlink Development Co. (HK)**
Will establish Beijing-Hong Kong Nonmetallic Mineral Products Co. Ltd. joint venture to produce talcum powder. $752,000 (¥2.8 million). (50-50). 12/89.

**Nihon Parkerizing (Japan)/Federation of Sales Cooperatives, Jiading County, Shanghai**
Will establish Shanghai Parkerizing joint venture to produce undercoatings. $806,000 (¥3 million). 12/89.

### *Other*

**Export Credit Agency and Export Development Corp. (Canada)**
Will provide loan for construction of ethylene oxide plant in Jilin. $24.1 million (C$28.3 million). 12/89.

**Degussa Carbon Black Corp. (US), subsidiary of Degussa Corp. (US)/Qingdao Carbon Black Co.**
Licensed technology for carbon black plant. Will also train plant personnel. 12/89.

**Industrial Bank of Japan and Bank of Tokyo Ltd. (Japan)**
Will participate in $56 million syndicated loan to Construction Bank of China to build petrochemical plant in Shanghai. 12/89.

## Construction Materials and Equipment

### *China's Imports*

**China Resources Machinery Co. (HK)**
Supplied 3,000 tonnes rolled steel and 15,000 tonnes wire rods through World Bank Pishihang-Chaohu Area Development Project. $7.14 million. 1/90.

### *China's Investments Abroad*

**USSR/Suifenhe City, Heilongjiang**
Established joint venture 26-kiln mechanized brick factory. $2.83 million (SFr4.61 million). 12/89.

**nnovation Publishing House (Singapore)/New Technology Development Co., Shanxi**
Will establish Huaxin Enterprise Co. Ltd. joint venture to provide building materials. 11/89.

## Consumer Goods

### *Investments in China*

**Pearls International (WA) Pty Ltd. (Australia)/Institute of Nuclear Research, Shanghai**
Will establish joint venture to produce shell ornaments and jewelry using Chinese radiation coloration technology. 11/89.

### *China's Investments Abroad*

**NA (HK)/Xingguang Clock and Watch Corp., Hefei, Anhui**
Will establish joint venture in Thailand to manufacture clocks. $256,000(HK$2 million). 11/89.

## Electronics and Computer Software

### *China's Imports*

**Compagnie des Machines Bull (France)/People's Insurance Corp. of China**
Sold 34 DPX2000 computer systems. 12/89.

### *Investments in China*

**Crown Young Industries (HK), subsidiary of Citizen Watch Co. (Japan)**
Will establish plant in Shenzhen to assemble printers and calculators. $34.9 (¥130 million). 12/89.

**Kanebo Ltd. (Japan)/Jiao Tong University**
Established Shanghai Hua-Zhong Computer Software Developme: ' td. joint venture to develop software for workstations and pers... computers. $8.06 million (¥30 million). (50-50). 12/89.

### *Other*

**Kenwood Corp. (Japan)**
Opened sales and service center in Beijing for its electronic products. 12/89.

**Silicon Graphics Inc. (US)/INSTRIMPEX**
Established Zhongyi-SGI Computer Service Center to provide maintenance contracts and emergency service calls. 12/89.

**Apple Computer (US)**
Donated Macintosh equipment and software to Beijing University's physics department. $100,000. 11/89.

**China Hewlett-Packard Computer Co. (US-PRC joint venture)/Qinghua University**
Supplied four HP9000/300 workstations to the newly established Qinghua-CHP Automated Design Center. 11/89.

## Engineering and Construction

### *China's Investments Abroad*

**National Iron and Steel Mill (Singapore)/China State Construction Engineering Corp.**
Established joint venture to explore markets for building materials, machinery, and construction projects. $255,000 (S$500,000). (SGP:60%-PRC:40%). 11/89.

## Food and Food Processing

### *China's Imports*

**SEN (FRG)/China National Light Industrial Machinery Corp. and China National Import/Export Corp.**
Will supply technology and equipment to upgrade breweries and beverage plants. 1/90.

### *Investments in China*

**NA (Singapore)/Baiyun District, Guangzhou**
Established soya-bean milk production company and plastic aerated water bottle production line. $5.33 million. 11/89.

**Wm. Wrigley Jr. Co.**
Will establish wholly foreign-owned enterprise in Guangdong ETDZ to produce chewing gum. Estimated investment: $20 million. 11/89.

## Leasing and Insurance

### *Other*

**Fuji Bank (Japan)/Nan Guang Corp.**
Signed agreement naming Nan Guang Corp. as joint-venture partner of China Kang Fu International Leasing Co. Ltd., replacing Kanghua Development Corp. 12/89.

## Machinery and Machine Tools

### *China's Imports*

**MAG (Austria)/Shantou Special Enamel-Insulated Wire Industrial Co. Ltd.**
Will sell enamel-insulated production line. $4.93 million (AS64.8 million). 1/90.

**Voest-Alpine GmbH (Austria)/CMC**
Sold welding-rod production line. $5.48 million (AS72 million). 1/90.

**Nokia Cable Machinery Oy (Finland)/Guangdong Provincial Machinery Import/Export Co.**
Signed agreement to supply technology for production of cables for shipping, drilling platforms, high-rise buildings, subways, and power systems. $2.1 million (FMk8.96 million). 12/89.

### *Investments in China*

**Japan Machinery Co. Ltd. and Toyo Stainless Steel Industrial Co. Ltd. (Japan)/CITIC, Shenzhen branch**
Established Toyo Metal Products (Shenzhen) Co. Ltd. joint venture to produce stainless steel pipe, casing pipe and valves and pumps. $634,000 (J¥90 million). (JP:60%-PRC40%). 11/89.

## Medical Supplies and Equipment

### *Investments in China*

**Nihon Kohden Corp. and Taiyo Koeki Co. (Japan)/Shanghai Medical Electronics Instrument Factory**
Will establish Shanghai Kohden Medical Instrument Corp. joint venture to manufacture portable electrocardiographs. $2.7 million. (JP:60%-PRC:40%). 12/89.

## Metals and Minerals

### *China's Imports*

**NA (Australia, Japan, and US)/Tangshan Iron and Steel Co.**
Sold feeding system, automatic sintering system, and automatic blast furnace control system. $2.8 million. 11/89.

### *China's Investments Abroad*

**Dusseldorf (FRG)/Baoshan Iron and Steel Plant, Shanghai**
PRC established Technology Trade Co. Ltd. to conduct trade business directly with Baoshan. 12/89.

### *Other*

**AEG (FRG)**
Opened three centers in Beijing to train metallurgical engineers and technicians in program logic control. $219,000 (DM400,000). 12/89.

## Mining Equipment

### *Other*

**USSR/MOE**
Conducted feasibility study for coal slurry pipeline from Bingxian County, Shanxi to Weihe Power Plant. USSR will provide values, control systems, equipment and pumps. 12/89.

## Packaging, Pulp and Paper

### *China's Imports*

**NA (South Korea)/Emery Cloth and Paper Factory, Tianjin**
Sold emery paper production line. $1.45 million (¥5.4million). 12/89.

## Pharmaceuticals

### *China's Imports*

**NA (Austria)/Tangshan Starch Glucose Factory**
Will sell equipment used to extract citric acid. Austrian government will provide loan for the sale. $4.96 million. 12/89.

### *Investments in China*

**New World Co. (US)/Chongqing, Sichuan**
Established New Hepar Biotechnology Development Co. Ltd. to produce crude heparin sodium for further refinement in the US and Sweden. $600,000. 11/89.

**Xinli Pharmaceutical Import and Export Corp. (HK)/Shijiazhuang Zhongxing Industrial Corp.**
Established Union Pharmaceutical Corp. Ltd. joint venture to produce 150 tpy sodium ampicillin. $7.33 million (¥27.3 million). 11/89.

### *Other*

**The World Bank**
Will provide loan to Suzhou No. 2 Pharmaceutical Factory to expand penicillin production. $3 million.

## Power Plants

### *China's Imports*

**Neste Oy (Finland)**
Supplied technology for installation of microwave station in Jiange County, Sichuan. $150,000. 12/89.

**Wartsila Oy (Finland)/Guangdong Zhengcheng Thermal Plant**
Will supply two diesel engines with soft loan provided by Finnish government. $4.26 million (FMk18.2 million). 12/89.

### *Investments in China*

**NA (HK)/Shunde County, Guangdong**
Will fund construction of power plant. $29.5 million. 10/89.

### Other

**Electric Power Development Co., Mitsui Mining Co., Industrial Bank of Japan, and other Japanese companies**
Will conduct study of possible joint construction projects of power plants in China. 1/90.

## Printing Equipment

### Investments in China

**Baldwin Technology Co. Inc. (US)**
Established wholly owned Baldwin Printing Control Equipment (Beijing) Ltd. to provide support services to Baldwin product users. $750,000. 1/90.

## Property Management and Development

### Other

**Kumagai Gumi (HK) Ltd., subsidiary of Kumagai Gumi Co. (Japan)**
Purchased 11% share of Haitian Hotel Co. joint venture in Hainan from Marubeni Corp. (Japan). 12/89.

## Ships and Shipping

### Investments in China

**Ackon International Corp. (US) and Pacific International Lines Ltd. (Singapore)/Shanghai Jin Jiang Shipping Corp.**
Established Shanghai International Container Co. joint venture to produce 16,000 containers per year. $9 million. 1/90.

**NA (France)/Guizhou**
Will establish shipping joint venture for service on Wujiang, Chishuhe, and Yangtse rivers. $9.4 million (¥35 million). (50-50). 1/90.

### Other

**Lloyd's Register of Shipping (UK)**
Will expand cooperation with Chinese shipbuilding industry. 11/89.

## Telecommunications

### China's Imports

**L.M. Ericsson (Australia)/Ningbo**
Will supply 72,000 program-controlled exchangers. 1fs.3/90.

**ASM (France)/Zhuhai Optical Fiber Co.**
Will supply equipment for fiber optic production. $4.74 million (FFr30 million). 12/89.

**Siemens AG (FRG)/Zhuhai Optical Fiber Co.**
Will provide technology for coloration and protective coating production lines. $3.76 (DM7.02 million). 12/89.

### China's Investments Abroad

**Cable & Wireless Plc (UK)/CITIC**
Discussing plan to sell 20% share of Hong Kong Telecommunications Corp. $896 million (HK$7 billion). 1/90.

### Other

**Pacific Link Communication Ltd. (HK) and L.M. Ericsson (Sweden)/Beijing**
Will give mobile telephone network with initial capacity for 2,000 subscribers. 1/90.

**Bankers Trust Asia Ltd. (US) and Shortridge Ltd. (HK), subsidiary of CITIC/CITIC**
Arranged loan for AsiaSat 1 satellite project. $50 million. 1//89.

## Textiles

### Investments in China

**Fountain Set (Holdings) Ltd. (HK)/Chang An Economic Development Corp. and Dongguan Textiles Import/Export Corp., Guangdong**
Established joint venture to produce 20-30,000 lbs fabric per day. (HK:51%-PRC:49%). 12/89.

**Macao Textile Co. (Macao)/Hebei Provincial Textile Import and Export Co. and Handan No. 1 Cotton Mill**
Established Xinda Cotton Textiles Co. Ltd. joint venture. $16.58 million. 12/89.

**Chori Co. Ltd. (Japan)/Xinjiang**
Established joint venture to produce 100% pure bluish dogbane yarn and high-count blended bluish dogbane yarn. 11/89.

## Transportation

### China's Imports

**Akkummulatorenfabrik Junfer (Austria)/CMC and Beihai Storage Battery Plant, Guangxi**
Will supply lead acid storage battery production line for cars and boats. $5.17 million (AS67.93 million). 1/90.

**Miba Gleitlager AG (Austria)/Shaoguan Fittings Factory, Guangdong**
Will sell bearing shell production line. $5.13 million (AS67.5 million). 1/90.

**USSR/Xinjiang Aviation Co.**
Sold one TU-154M passenger airplane. 1/90.

### Investments in China

**Neptune Orient Lines (Singapore)/SINOTRANS**
Established International Transportation & Cargo Services Ltd. joint venture to provide trucking service between Fujian and Guangdong. 1/90.

**Tong Il Co. (South Korea)/Qingdao, Shangdong**
Will invest in automobile components plant. $7.5 million. 12/89.

**Lockheed Corp. (US), Hutchison China Trade Holdings Ltd. (HK)/CAAC, Guangzhou branch**
Started operation of Guangzhou Aircraft Maintenance Engineering Co. Ltd. joint venture. (US:25%-HK:25%-PRC:50%). $30 million. 11/89.

**Kingston Development Corp. (US)/China Eastern Airlines, Shanghai**
Will construct and jointly operate for 20 years ticketing and office facilities for airlines operating in Shanghai. $53.7 million. 10/89.

### China's Investments Abroad

**Dragonair (HK)/CITIC**
Sold 26.6% share to PRC. $12.8 million (HK$100 million). 12/89.

### Other

**Fuji Bank (Japan), National Westminster Bank (UK), Creditanstalt (Austria), Banque Paribas and Credit Agricole (France)/CAAC**
Will co-finance 12-year loan for purchase of Boeing 747-400. $96 million. 11/89.

**Soviet Aviation Import and Export Corp. (USSR)/The Land Economic Group, Hainan**
Will exchange three Tupolev-154 and three Yak-42 airplanes for garments and electric appliances. $92 million (SFr150 million). 11/89.

## Miscellaneous

### China's Imports

**The East Asiatic Co. (Hong Kong) Ltd. (Denmark)/State Education Commission**
Will supply graphic arts equipment through World Bank Textbook Project. $22 million. 12/89.

### Investments in China

**FRG/Nanjing**
Will establish center to promote small business cooperation. $5.36 million (DM10 million). (50-50). 1/90.

### China's Investments Abroad

**Trade Development Board Holdings (Singapore)/China National Commodity Inspection Corp., Beijing**
Established Inspection Services International Pte Ltd. joint venture to provide commodity inspection and survey services. (SGP:51%-PRC:49%). 11/89.

### Other

**Bangladesh**
Signed trade agreement to exchange leather, jute, teas, tobacco for industrial machinery. $31 million. 1/90.

**Ford Foundation (US)/Yunnan**
Will provide grant for study of comprehensive devcelopment of proverty-stricken areas. $800,000. 1/90.

**Cuba**
Signed trade agreement to export synthetic nickel, furniture, citrus, and sugar for industrial machinery and equipment and ferrochrome. Expected value: $500 million. 12/89.

**Turkey**
Signed trade agreement to export fertilizer and iron and steel products and to import coal and crude oil. 12/89.

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