Export Opportunities in China for ADS Machinery Corporation

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I HEREBY RECOMMEND THAT THE INTERNSHIP REPORT PREPARED UNDER MY SUPERVISION BY GUANGHUI LI ENTITLED EXPORT OPPORTUNITIES IN CHINA FOR ADS MACHINERY CORPORATION BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN SOCIAL AND APPLIED ECONOMICS.

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ABSTRACT

From June to September 1989, the author did an internship with ADS Machinery Corporation in Warren, Ohio. Under the direct supervision of the Vice President of Sales, the author’s main task was to carry out an investigation of the company’s export business. The investigation included export market analysis and business practice analysis. Based on the basis of this research and the author’s own working experiences in Sino-American trade, a proposal for the company’s export strategy was completed.

In the competitive international market, establishing and maintaining successful export markets in developing countries is a difficult task, especially for small firms. Many small firms in the United States are reluctant to enter the international market because of both high cost and high risk. However, as a result of their willingness to accept the risks and costs, ADS has been able to successfully developed its export markets over the past ten years. One of its current objective is to build on their recent success and expand its export market.

The author was asked to analyze their current position in the international market place and make recommendations for improvements where needed. This report outlines the author’s analysis of ADS’s international efforts.
The purpose of this internship report is to evaluate the Chinese import market for various products produced by the author's intern employer, ADS Machinery Company in Warren, Ohio. Much of the data gathered for this report was provided by senior management of ADS Machinery Company and through the author's personal four years of experience working in the Chinese iron and steel and nonferrous metal industries.

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HISTORY OF THE COMPANY

A D S Machinery Corporation (ADS) was founded in 1956 as Associate Design Service, an equal partnership, by three principals, in a rented, converted, four-car garage on East Market Street across from Trumbull Memorial Hospital, in Warren, Ohio. The first engineering work contracted by the new company was the design and testing of tube mill equipment for Aetna Standard Engineering and Foundry of Ellwood City, Pennsylvania. In its early period, ADS did mostly engineering service of flat rolled metal processing lines for a wide range of clients. The company began building machinery about two years after its founding. Early projects included Core Winder, Coil Car, Mill Tables of different steel sheet chemical processing line. In January of 1974, the company moved into its present facilities and was divided into two divisions, a manufacturing division and engineering division.

Today the principal operations of ADS is concentrated in the design, manufacture, and installation of equipment for the processing of flat rolled metal. It also sells production machine line for use in cleaning, annealing, pickling, tension leveling, coating, galvanizing, electroplating, build-up and inspection, shearing, and slitting. The size of customer purchases ranges from single machines to complete turnkey processing lines. ADS customers include processors and finishers of steel, aluminum, brass and copper alloys, stainless steel and special alloys. The manufacturing division also customs builds various types of machinery to the users specification.
BACKGROUND OF ADS EXPORTS

Early in the 1980's, the steel industry in the United States fell into a severe recession resulting in plant closing and the discontinuance of many functions. The steel industry's problems were caused by many factors including:

1) Strong competition from foreign producers with lower production costs and more modern and efficient production facilities capable of producing high quality products.

2) Obsolete and inefficient production facilities in the U.S.

3) Poor labor and management attitude.

4) Strong U.S. dollar making foreign imports cheap and exports expensive.

5) High interest rates in the U.S., making it harder for firms to modernize its facilities.

These same factors and others also had an adverse impact on machinery manufacturers causing the demise of some and the reduction in the size of many others. During the early 1980s, ADS also encountered difficult financial times. In an effort to lessen the impact of prevailing market conditions that affected the industry, ADS decided to seek new markets overseas. Fortunately, for ADS, its decision to enter the export market which required significant start-up cost was made at the time while it was still profitable and able to make the necessary financial commitment. Consequently, ADS was less affected by the recession than the rest of the industry thanks to its expansion into export sales.
Today, the company exports to Australia, Brazil, Canada, China, Mexico, Pakistan, Philippines, Poland, Puerto Rico, Spain, Soviet Union and Venezuela. It also actively seeks to penetrate other markets. The company's domestic customers include producers and users ranging in size from small two people shops to large metal processing corporations.
THE CHINESE MARKET

A. Market Demand

The majority of ADS's products sold in China are concentrated in the iron, steel and nonferrous metal industry. Therefore, a detailed knowledge of the market demand in these industries is helpful.

1. Iron and Steel Industry

In the Chinese iron and steel industry, large iron mines are reasonably efficient, whereas small ones are often not. During the past fifteen to twenty years, production methods have been improved, allowing the production of relatively high-grade concentrates even from low-grade magnetite and hematite ores. Even with the improved production methods it is still very urgent for China to further modernize its iron and steel industry. Take for example, the Anshan Steel Company which is one of the world's largest steel producing companies, producing over 7 million tons of steel in 1978, with more than 200,000 workers. Its performance is quite good when measured against others in the Chinese steel industry. Yet, this company also suffers from all the weaknesses that have made steel a heavy burden on China's economy. These include inadequate investment in modernization, lack of capacity for alloy steels, and poor quality of iron ore. Open hearths furnaces are still in common use, whereas, in the West these have been replaced with modern furnaces using the latest technology. The fabrication facilities are archaic. Since Anshan represent more than a fifth of China's steel making capacity, modernization of the complex's 54 mills and workshops is vital if the
industry is to meet China's current and future steel targets.

With most production plants currently being under-utilized, China is reluctant to start bold new modernization projects. Bottlenecks remain in the production of finished rolled steel and high quality alloys. Both are important products in the industrialization of the economy. Furthermore, an attempt to increase the variety and quality of metal products will require the development of purification and refining facilities for enhancing the quality of raw materials, iron ore and coal.

2. Nonferrous Metal Industry

China has one of the world's largest reserves of mineral resources, fully capable of supporting a first-rank economy. Nevertheless, it is deficient in nonferrous metals production and has become increasingly dependent on imports to meet the growing requirements. Chinese planners regard nonferrous metal as a primary source for income. They are interested in making compensation trade arrangements with foreign firms in an effort to save hard currency.

China's nonferrous natural wealth includes tin, mercury, titanium, antimony, tungsten, manganese, molybdenum, zinc, copper, nickel, uranium, bismuth, gallium and lead. China's tin reserves are large, totaling at least 500,000 tons. Estimated mercury reserves are about 400,000 tons. Half of the world reserves of antimony ore—about two million tons—are in China. This amount could easily satisfy China's own demand and provide for exports. However, as China has only limited technology and facilities which make it can not even produce enough to meet its own demand. Take for another example China's tungsten reserves—one million tons—are the world's largest. But current tungsten production is only about 15,000 to
20,000 tons of concentrates. In recent years, domestic consumption has steadily risen, making the shortage more acute.

China has recently made important mineral discoveries. These include uranium, copper, lead, and zinc in Sichuan province, bauxite in Pingguo, Guangxi province, silver in Henan province, reserves of 8 million tons copper in Jiangxi and lead and zinc in Yunan province.

Tin, tungsten, and antimony dominate China’s exports. China also exports molybdenum and fluorspar. Production of traditional export metals is still not enough to allow China to export in any significant amounts; the Chinese have failed to develop their reserve to the extent necessary to become a major exporter.

In the past, the Chinese government has stressed the development of agriculture, petroleum, transportation, and fertilizer industries, leaving limited resources to metals. As a result, the industry has failed to develop new resources of raw materials.

Recently, the Chinese government recognized that it can not remain dependent on outdated technology. It needs new refining capacity to boost output. China has scheduled the expansion of output for aluminum, copper, nickel, platinum, titanium, tungsten, and zinc. If the scheduled expansion is to be successful, China will need to import plants as well as mining and drilling equipment.

From the above analysis, it can be concluded that in the iron and steel industry in China, modernization of the outdated equipment is the top priority. In the nonferrous industry, development of new plants and facilities has the highest priority. ADS has the capability to build and design new machine lines and rebuild old lines. With these capabilities
it can expect a very strong market for its products in China. Assuming, of course, that the Chinese economy remains stable in the future.

B. Business Practice

In order to be effective in China's huge market, it is important that ADS has a good understanding of trade practices common to that market.

1. Foreign Trade Corporations

In China, the basic responsibility for carrying out foreign trade rests with Foreign Trade Corporations. Generally speaking, there are two kinds of trading organizations. Corporations such as China National Technical Import and Export Corporation, China National Instrument Import and Export Corporation and are controlled by the Ministry of Foreign Economy and Trade. Each corporation has a special area in which it is responsible. For instance, China National Technical Import and Export Corporation is responsible for projects like technology transfer, sales of technology, sales of know-how, sales of the whole plant, and sales of machine lines. China National Instrument Import and Export Corporation is responsible for sales of scientific instruments. These large corporations are responsible for all the projects in China - usually huge projects.

Additionally, each industry ministry in China has its own trading company. For example, China Coal Import and Export Corporation belongs to the Ministry of Coal. These corporations are authorized to conduct, within their industry area, (1) technical negotiation with the foreign firms and (2) commercial negotiation for relatively small projects. They also deal with projects involving counter-trade, joint venture, and technical exchange activities.

2. Entering the Market
For foreign firms, business with China can be profitable once its governmental hierarchy and business customs are understood. Initial inquiries regarding possible product introduction into China and preliminary negotiation are usually done by mail. However, face to face contact with Chinese delegations in the home country can be more effective. If Chinese authorities respond, it is usually a positive one. The Chinese do not respond if they are not interested. They may ask for more information or express an interest in holding talks.

Serious contacts between the Chinese firm and the foreign firm should be by written proposal. The proposal is a formal solicitation for business with the appropriate Chinese units. The proposal should concentrate on just one product or product line and, most important, should be submitted to the right authority. In China a trade bureaucracy has sprung up and letters sent to the wrong agency are seldom forwarded. It can take up to a year before the first serious contract negotiations are undertaken. China’s bureaucracy works slowly and even its most efficient offices have overworked English-Language staffs. For this reason, letters should be concise and, if possible, written in Chinese.

An experienced consultant is helpful in gauging the feasibility of a China venture and in influencing decision makers who may not be reached through regular channels. Chinese officials prefer to deal directly with firms responsible for sale instead of through middleman. Nevertheless, because of the lack of accurate information about China, the difficulty in delivering business proposals to the correct organization, and the high cost of maintaining an office in China, employment of experienced consultants may be critical to the success of small U.S. firms.
C. Negotiating the Contract

Chinese organizations are more inclined to invite firms that offer to hold technical seminars in China than firms that merely want to make a sales presentation. They often try to exploit the enthusiasm of foreign companies, to obtain free consulting service. On the other hand, seminars provide foreign businessmen a good opportunity to sell the merit of their technology to agents of end-users. Seminars can be narrow or broad, but all should stress a firm’s most advanced technologies. The Chinese businessman will expect the foreign companies to send its most technically knowledgeable spokesman. Chinese technicians will want to know everything worth knowing about the product. China’s industry tends to be vertically integrated. Therefore, the foreign company’s spokesman must be prepared to answer questions relating to all levels of production.

In actual negotiations, technical experts who have a detailed understanding of the design and performance of the foreign company’s products will make the best impression on the Chinese negotiators. Of course, the foreign company’s representative must have the authority to negotiate and sign a contract. For time-conscious businessmen, the pace of Chinese negotiation could be frustrating. Chinese businessmen are patient and attentive to detail. It will be to the foreign firm’s advantage to be equally patient and attentive to detail. The normal length of contract negotiation range from five days to two weeks.

The complexity of the subject will determine the time period necessary to conduct the seminar. Usually, the seminar sessions begins at 9 a.m. in a negotiating building of the Chinese trade organization. The seminar is usually split into a three hour morning session followed by a two hour
lunch break and another three hour afternoon session.

The Chinese make a distinction between technical and commercial negotiations. In format, commercial negotiations resemble the technical seminar. The Chinese reach decisions privately and collectively. How relationships develop during the negotiating process affects Chinese attitudes on how they will conduct business. They attach great importance to getting to know their counterparts and maintaining good relationships with "old friends." China's emphasis on buying the most modern technology reflects a wariness of getting cheated. (In the 1950s, China bought a huge amount of Soviet equipment they now believe was second-rate.) The Chinese view foreigners as a source of suffering inflicted on them over the last century, beginning with the Opium Wars and enduring through trade embargoes after World War II. Two themes run through China's trade policy: "Self reliance" and trading on the basis of "Equality and mutual benefit." If there is trade, negotiations and transactions are to be conducted as between equals. Their culture predisposes the Chinese to rely on personal and long-term relationships in contrast to the Western preference of impersonal, formal legal mechanisms. A congenial atmosphere and the context in which discussions are taking place are immensely important. In Western society, a legal contract is context free. All meaning is in the words of the contract. In high-context cultures like China's, the entire circumstance is more meaningful.

Foreign firms that have been the most successful in China are those that have maintained the most continuous and closest relations. While a long-term relationship is necessary, it is hardly sufficient. The Chinese have many "old friends." As proof of their friendship, they expect the
same of Western businesses. If mountains must be moved to get a shipment of goods to the Chinese party on the date agreed and at the price specified, the foreign firm who arranged the deal had best be prepared to move those mountains. As long as you remain true to your word, you have little to fear of competitive replacement.

Company negotiators must be temperamentally as well as technically qualified. The Chinese have characterized Western executives as arrogant, impersonal, heavy-handed, rigid, impatient, tense, and pampered. Warmth, friendliness, a ready smile, an interest in people, and the ability to earn the regard and respect of others from different backgrounds are essential. Flexibility — the ability to adapt — and energy — the ability to work long hours and endure stress — are also important, as responsibilities tend to be broader and less defined in China. Since the foreign representatives may have to stay in Beijing for weeks. The opportunity cost of sending talented specialists to China may therefore be considerable. Those who cannot stand foreign travel, extended absences, long stays in austere hotels, and the absence of night life may find themselves quite unhappy in Beijing. Foreign firms should try to send people with experiences in developing countries, particularly experiences in Southeast Asia where Chinese culture and customs remain strong.

The Chinese are tough-minded, well-prepared, and willing to use a variety of tactics to get the best deal. They are masters at pitting competitors against one another. Chinese units try to convince firms that other firms are interested in the same contract. They might exaggerate the terms offered by one firm in an effort to get another firm to lower its price, so foreign firms should be well prepared for this tactic.
In general foreign firms should be well-prepared, persistence, and patience. Western traders often wonder whether they must grease palms to make successful business deals and beat their competitors. Officially, bribery is illegal in China. In practice, however, it is popular in some parts of China. In other Asian countries, such as Japan, Korea, and Malaysia, the government takes the attitude that businessmen should not be hamstrung in their efforts to develop export markets.

However, bribery saps political vitality and undermines a people's faith in the government. It is important to note that from the U.S. businessman's point of view, the U.S. Congress passed the 1977 Foreign Corrupt Practice Act, making it a criminal offense to bribe foreign officials to secure or retain business abroad. This may cause some American companies to lose business to their competitors especially when other nations do not outlaw bribery. But, American stands for competition on the basis of quality, price, and service, and not payola. If, in the short run, this costs American firms jobs and money, then that's the price for setting high ethical standards.
A large portion of ADS's export market is in the Far East. The demand for ADS's products are high especially in China. Of major concern is the economic and political stability in many countries in that region. Their economic situation is seriously affected by their political environment.

The economic system in the People's Republic of China is characterized by state ownership of property. The State supplies firms with materials, funds, plants and equipment, and personnel. Firms produce according to State Plans. In 1977 China began its economic reform. The market economy was introduced in stages. China's private economy grew very fast. But after the events in June 1989 (the demonstration in Beijing and many other Chinese cities) the economy was seriously affected. Many Western countries including United States imposed economic sanction against China. This resulted in the suspension of many ongoing projects. Foreign companies should consider these factors before undertaking business ventures.

Trade between the United States and China is significant for both countries. The United States is China's third largest trading partner. Starting early in 1990, the Chinese economy has begun to improved again. In May 1990 the total import and export for China reached $9.54 billion.\textsuperscript{1} On the other hand, the Chinese government still wants to modernize its economy. The iron and steel industry and nonferrous metals industry is still listed as the top development industry. This means ADS still has ample opportunities to further develop its efforts in the Chinese export
market.
RECOMMENDATION

ADS's export business to China is potentially very large but unstable. Facing this situation, the company should cautiously continue its business investment in China.
NOTE

*1. Adopted form The People's Daily, June 22, 1990, People Republic of China