Distribution & Logistics Development in China: the Revolution has begun.

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Abstract

Prior to the economic reform movement, China’s centrally planned, three-tier system dominated the distribution sector. After the 1980s, this system gradually shifted away from the socialist mode to the free market mode. Today, China’s distribution system lies somewhere between these two modes.

Since the reform, China’s government has been encouraging export-oriented foreign firms investments in Free Trade Zones along the coast. Foreign firms do not enjoy the same inland distribution and logistics rights as their Chinese counterparts. However, the distribution puzzle is not only faced by foreign firms, but also by Chinese firms that operate nationwide. China’s undeveloped infrastructure, government regulations, and regional protectionism fragment distribution channels throughout China.

However, there are three main forces that are changing and modernizing China’s distribution and logistics system. These are the booming economy, entering the WTO and e-commerce. The inevitable revolution of China’s distribution and logistics system is on the way.

Keywords
China, Distribution, WTO, e-commerce
1.0 Introduction

Prior to the economic reform movement, China’s centrally planned, three-tier system dominated the distribution sector. After the 1980s, this system gradually shifted away from the socialist mode to the free market mode. Today, there are three main forces that are changing and modernizing China’s distribution and logistics system. These are the booming economy, entering the WTO and e-commerce. While great changes have been made, China’s distribution system still lies somewhere between socialism and free-market capitalism. This paper addresses issues of interest to firms wishing to distribute good throughout China. It provides a historical structure for viewing distribution and logistics in China as well as providing a snapshot of current problems facing firms expanding operations there. Finally, it provides a synopsis of lessons learned by firms currently operating in China as well as views of future trends.

2.0 China’s Traditional Distribution System

Before we know where China’s distribution system is and where it is going to go, we must determine where it has been in the past.

In the pre-reform era, prior to the mid-1980s, both China’s production and distribution were conducted solely according to the dictates of the State Plan; factories manufactured what, and how much, central planners told them to produce; distribution channels within China were strictly controlled by the three-tier system.

China’s distribution networks during this period were organized along rigid, vertical lines. Tier-1 distributors were located in Beijing, Shanghai, Tianjin, and Guangzhou; tier-2 consisted of wholesalers in the provincial capitals and medium-sized cities; and tier-3 wholesalers operated in smaller cities and towns (Chen, 2001). State-owned distributors shipped products for each industry from Tier-1 facilities to province and cities, then to local retailers. With no market forces at work, this extended distribution system increased the prices as each layer added additional operating margins ranging from 5-17%.
Distributors essentially provided basic logistics services (transportation and warehousing) but no marketing support. Distributors were not allowed to import products since that right was reserved for foreign trade corporations (FTCs). Once an import entered the country, it was handed over to the appropriate distributor because FTCs were forbidden to sell the goods downstream (Baldinger, 1998).

This huge system was formed in the socialist mode, which is based on resource allocation rather than market demands. There was a basic advantage to this model. Given China’s size and complicated geographic environment, only the state had the resources to build and operate a costly, national distribution system. Hence, despite the liberalization of the distribution sector since in the post-reform era, many Chinese and foreign suppliers still rely on this distribution system, because of its extensive network.

As China grew more interested in trading with the outside world, leaders recognized the need to liberalize this system. With the introduction of reforms in the mid-1980s, control gradually shifted away from central government control to the provinces and municipalities, which gained the right to establish their own trading companies. By the late 1980s, domestic enterprises that met specified trade volumes were permitted to import and export directly.

3.0 China’s Current Distribution System

One of the biggest current changes in China’s business environment is the opening of distribution rights. There can be no true market access without distribution rights. Prior to China’s entry into the WTO, foreign firms were severely restricted from providing distribution services in China for both their own proprietary operations and for third parties (Brecher and Gelb, 1997). Foreign companies with multiple operations in China were prohibited from establishing consolidated distribution activities, such as shipping and invoicing (Naughton, 1996). That is changing. However, even after their WTO entrance, China will not phase out most restrictions affecting the sales, service, and distribution sectors to foreign firms until 2005 (AmCham-China, 2001).
Distribution problem exists not only with foreign companies, but also with well-known Chinese companies. When local companies extend their business across provincial borders, regional protectionism forces local companies to allocate extensive costs to shipping, handling, and warehousing. For example, supply-chain-related costs can be 30% to 40% of wholesale prices in China, compared with 5% to 20% in the U.S. (Tanzer, 2001).

Today, China’s distribution systems lie somewhere between a rigid planned structure and a free market system. The nationwide State system still exists, but the rigid demarcations between each level, and between different parts of the system, have broken down. Manufacturers may now bypass wholesalers and sell directly to retailers, and FTCs have set up their own distribution networks. Moreover, the three traditional tiers now compete against each other as well as against new, privately owned companies and foreign firms eager for a piece of the pie.

In order to get a more accurate and more detailed picture of China’s current distribution system, we will analyze it from two perspectives: a Chinese company’s standpoint and a foreign company’s standpoint.

### 3.1. Chinese Company Perspective:

Today, China’s market has many virtual “Great Walls.” Three types of “bricks”: – unbalanced economic development, the need for guanxi and regional protectionism, has built these walls.

#### 3.1.1 Unbalanced Economic Development

With a population of 1.3 billion, China is the largest potential market in the world (Levine, 2001). However, it is wrong to view China as one homogenous market. In reality it has at least two “countries” contained within it. The first is a coastal urban megalopolis of 400 million people with a per capita income in the neighborhood of $1,000 (the magic number above which Chinese can start buying luxuries) and a highly
educated populace (Powell, 2002). The second country is a vast Third World interior of 900 million, where incomes can be as low as $200 a year. The following economic maps (Figure 1) show the great disparity between coastal and inland provinces.

China is too vast and varied a country for companies to attempt a national distribution system. With China’s geographic size (almost as same as the U.S.) and a wide range of per capita GDP and disposable income, most Chinese distributors are small and specialized in limited types of goods. Large-scale distributors and wholesalers are few. Suppliers have to deal with many different distributors or wholesalers to achieve national coverage. This fragmented distribution network makes penetration of outside goods especially difficult, since outside suppliers, while still native Chinese, do not have “Guanxi,” i.e. personal relationships, with local distribution players (Su and Littefield, 2001).

Figure 1 Economic Maps of China (China Statistical Yearbook, 2000).
3.1.2 The Need for Guanxi

Chinese culture is distinguished from the Western Culture in many ways, including how business is conducted. A key difference is that Chinese prefer to deal with people they know and trust. On the surface this may seem similar to Western business procedures, however what this really means is that western companies as well as Chinese from different regions have to makes themselves known to Chinese companies before any business can take place. This is known as guanxi, which literally means relationships. Guanxi can also be viewed as “friendship with implications of continued exchange of favors” (Pye, 1992). Companies conducting business in China must understand that different business logic applies in China as opposed to Europe and the US. Unless a company understands the Chinese business logic used to reach decisions, nothing can be accomplished (Park and Luo, 2001). This logic has three levels in decreasing order of importance:

1. Guanxi or Relationships: What is the nature of your relationship with the other party?
2. Reasoning: Is what you are doing reasonable according to Chinese definitions?
3. Law: Is what you are doing legal?

In China, the right guanxi or connections will increase the odds or business success. While western businesses may not see this as necessarily cost effective, it does have advantages (Standiford and Marshall, 2000). By making the right connections an organization minimizes the risks, frustrations and disappointments of doing business in China.

How do you build guanxi? Well it is not necessarily by throwing money at the problem, which many would view as bribery (Snell and Tseng, 2001). The classic ethical standard of the Golden Rule--treating someone with decency while others treat them unfairly can be the basis of the relationship. It also starts with and builds on the trustworthiness of the individual or the company. If a company (or individual) has always delivered on their
promises, then they are being trustworthy and Chinese businesspeople are open to working with them again. However, failure to follow the rules of reciprocity and equity in a guanxi-based relationship results in loss of face and being labeled as untrustworthy (Luo and Chen, 1996). Being dependable and reliable through thick and thin also strengthens the relationship. For example, during the 1989 political instability in China, those companies that stayed were viewed as friends by the Chinese and their relationship was strengthened.

Once you have built guanxi, it can be used in different situations since guanxi is dynamic and certain social guanxi is transferable. For example, if person A wants to make a request of person C with whom A has no guanxi, A may seek out a member of his or her guanxi network, person B, who has guanxi with C. Given B provides A the introduction to C, a guanxi relationship may be established between A and C (Tsang, 1998). How important is this? Chon-Phung, general manager of Hewlett-Packard South Asia states that "a person who brings a buyer and seller together is more than a middleman -- he vouches for the reputation of the one he introduces. Thus, strangers doing business become strangers no more" (Chong-Phung, 1999). According to Victor Fund, Chairman of the Hong Kong investment bank Prudential Asia, "If you are being considered for a new partnership, a personal reference from a respected member of the Chinese business community is worth more than any amount of money you could throw on the table" (Kraar, 1994).

Connections with government officials are also important for doing business in China. However connections in the central government are not as important as they once were. As political and administrative overhead has decreased, many companies have found themselves doing fine without government subsidies. If they are not getting any help from the central government, then they tend to be less influenced by the government as well. However, government guanxi is of great importance when dealing with local government officials. That is because the third wall facing business in China is regional protectionism.
3.1.3 Regional Protectionism

Beyond the geographic size and unbalanced development, the political/legal barriers are the most powerful forces that separate China’s distribution market. Government interference on economic activities increases the risk to private investment and affects the extent of participation of private sector in the supplying and distribution of goods. Legislation sets the allowed boundaries of distribution firms. While these limits can be placed at a national level, the biggest impact of political/legal barriers on distribution markets is regional protectionism.

Provinces and municipalities have erected tariff and nontariff barriers to keep out one another’s products. As soon as you move across provincial borders in China, there are barriers. The current focus of logistics is provincial. The problems of vast geography and poor infrastructure were compounded by post-1949 Maoist doctrine. Then the “Great Helmsman” (no believer in the economic principle of comparative advantage), preached provincial and local self-reliance and control (Hachigian, 2001). Thus each province or city built its own steel mill, chemical plant, brewery and so forth. Tight state control over distribution was aimed at maximum employment, not efficient use of resources.

Since the 1980s, with the decline of central planning, economic authority has devolved to local governments. In some ways decentralization has worsened protectionism. Most state-owned enterprises are controlled by local governments. Local authorities are obsessed with local economic growth, employment, social stability, and tax revenues.

For example, the Volkswagen Santana monopolizes the taxi fleet and car market in Shanghai. The Shanghai provincial government imposes huge “license fees” on competing Citroen cars from Hubei province to protect the locally made Santana. Not surprisingly, the Shanghai government owns a stake in the VW joint venture. Hubei retaliates by ordering all its government units to buy local Citroen cars.

Many of the nearly 500 breweries across the country – usually owned by local governments – are protected from outside competitors by dubious health requirements and arbitrary duties. Beijing seeks to promote a handful of strong national cigarette
brands, but each province wrestles to preserve its inefficient but tax-generating cigarette factory (Tanzer, 2001).

Figure 2 compares the average freight distance between China and U.S.\(^1\). We should ignore the “Water” category, because the U.S. with two coasts has a natural coastwise freight advantage to China. In the other three categories, China is far behind the U.S. In air transport, for example, even though China has fewer short and mid-range air cargo services than the U.S., it must make use of them to fly cargo into the central regions which are not supported well by other modes of transport. This is reflected in the higher “average freight distance by air” in China. The lower “average freight distance by rail and by highway” reflects the fragmented distribution channels in China, especially in the “Highway” category.

![Figure 2: Average Freight Distance in 1998 (China vs U.S.)](image)

The issue of highway transport requires more of an explanation. While the average distance is the least of the four modes of freight, road transport accounts for 90% of passenger and 77% of freight traffic in China. Unfortunately, there are too few roads (as

\(^1\) The data comes from comparing information in the China Statistical Year Book and The National Transportation Data Archive of the U.S. Department of Transportation.
seen in figure 3\(^2\), and the roads that are available are of poor quality. Because of this, the typical vehicle only achieves speeds of 18-25 mph (30-40 km/hr).

![Figure 3: Road System Measures for Selected Countries (1999)](image)

<table>
<thead>
<tr>
<th></th>
<th>GERMANY</th>
<th>U.K.</th>
<th>MEXICO</th>
<th>U.S.</th>
<th>CHINA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads(Km)/1000 persons</td>
<td>7.93</td>
<td>6.25</td>
<td>3.18</td>
<td>22.96</td>
<td>1.07</td>
</tr>
<tr>
<td>Roads(Km)/Square Km</td>
<td>1.88</td>
<td>1.54</td>
<td>0.17</td>
<td>0.69</td>
<td>0.14</td>
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The government is aware of this limitation in the infrastructure and has a goal to connect all economic centers in the country by a modern road network. The goal was to have 808,000 miles of roadway (5,000 miles of that being highways) by the end of 2000, and 901,000 miles of roadway (12,400 miles of that being highways) by the end of 2010. Along with this was the development of two longitudes and two transverses highways. By the end of 2001, 10,100 miles of highway had been completed. However, this will still only be a highway density of 14.6 km per square km of highway as compared to Germany with 177 and the US with 64.

### 3.2. Foreign Company Perspective:

A 1998 US-China Business Council survey found that U.S. companies cited supply chain-related problems within their top-3 problems facing their Chinese operations. The

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immediate reason is the restrictions placed on providing distribution services on in using third parties. Foreign firms are required to import products through officially sanctioned trading companies. Third-party foreign trading companies and distributors have been prohibited from direct participation in the market and from providing a complete range of trading and distribution services.

Other reasons for the supply chain-related problems include:

- Difficulty in locating local qualified suppliers
- Underdeveloped information technology (IT) and telecommunications infrastructure
- The unreliability of the Chinese transportation infrastructure in many areas
- The high rate of damage/loss in transit.

Even with these problems, foreign companies are still entering China in order to make use of the China’s cheap labor costs or to establish long-term competitive advantages in this largest potential market in the world. However, to be successful in the long term, foreign companies are trying to establish, maintain, and strengthen their supply chains by three methods: the cluster approach, use of non-Chinese 3PLs, and local carriers.

3.2.1 Cluster Model

Firms expand internationally with many different methods. Research has developed several different models to reflect this. Experience has shown that many firms entering China tend to follow the tenants of two internationalization models: oligopolistic theory and network theory. The core of the oligopolistic theory is risk reduction. Specifically, the internationalization of a business is prone to risk. Firms wish to reduce this risk as much as possible. In order to do so, they will imitate the actions of other members of their oligopoly (Knickerbocker, 1973). The goal is that by imitating other firms’ actions, they reduce the risk of being different (McDougall et al., 1994). Network Theory argues that markets are basically relationships between customers, suppliers, competitors, manufacturers, and others (Jarillo, 1988); (Thorelli, 1986). The relationships drive businesses as they adapt to the behavior of other network members. In this view, relationships are more important than specific transactions. What we see in China is a fusion of these models which has been referred to as a cluster model.
In order to improve their odds of successfully entering China, many groups have banded together, or clustered. The main reason for this is that the Chinese government has an unwritten mandate that foreign-based system manufacturers must procure increasing amounts of components from local sources. These sources include domestic component suppliers as well as foreign entities with factories inside China. As a result, upstream foreign firms are asking, if not forcing, their original component suppliers to enter China with them. We see specific examples of this with the relations of OMRON and McDonalds and their suppliers.

OMRON is a large Japanese company that makes electronic sensors (it has 90% of the global market for those used in a standard computer mouse). In China, it already has a vast assembly plant, which imports essential components from Japan. In mid-January 2002, President Yoshio Tateishi stated that he wants output in China to double within three years and wants to set up a “quasi-headquarters” in Shanghai. He believes that moving large administrative facilities into China, smaller suppliers will follow. In case an OMRON supplier might not get the message, he adds that one of his main management goals now is to work with “local components makers” who might eventually be able to supply OMRON in China.

Other IT system manufacturers are also nudging the Integrated Circuit (IC)-packaging houses that supply them to set up shop in China. Companies like Nokia, Ericsson, and Philips are asking their suppliers: “How can we shorten the supply chain and reduce costs in China?” They expect the IC-packaging houses to help them reduce their transport costs.

In general, clustering companies enter China within the free trade zones (FTZ) and export most of their products to the world. These FTZs stretch down the eastern coast of China. Over the last few years, China has granted limited trading rights to foreign firms in the FTZs, so suppliers can freely trade with their upstream customers there.

In 1992, McDonalds entered China. The problem? McDonalds’ need for high-tech logistics meant it did not have the option of outsourcing to local logistics firms who did
not have the needed capabilities. Their solution? McDonalds convinced its longtime logistics provider HAVI Group LP to come with them.

HAVI is responsible for ensuring hundreds of McDonalds around China receive their frozen food at the right temperature, and receive their napkins and packages in nice shape. Furthermore, all of these must occur on time.

The only way to ensure delivery times was to own and manage a fleet of trucks operating out of distribution centers dotted strategically around the country. However, in addition to HAVI’s management distribution challenges, the laws against foreign companies doing nationwide distribution have meant putting together a patchwork of local licenses, paying local road toll collectors off, and operating in a very gray legal area.

3.2.2 Non-Chinese 3PL Model

Not each upstream firm has the power to force or convince their suppliers to follow them to China. Some of them are trying to outsource their logistics to non-Chinese third-party logistics (3PL) providers in China, because local third-party logistics providers within China are still emerging. In fact, less than two years ago the Chinese term “logistics” was not even recognized by business registration authorities.

Most large world-class logistics players have been striving to enter China. A few of them, such as UPS and MAERSK, have received licenses from the Chinese government recently. Their successes in China are the result of years of groundwork. For example, UPS began operating in China as early as 1988 by partnering with the Chinese government-owned Sinotrans, which flew UPS packages into the country. Through this cooperation, UPS not only brought significant profits to this primary government-owned enterprise, but also transferred many cutting edge techniques to China. MAERSK has bought 25 vessels (at upwards of $750 million) and more than 50% of its 700,000 containers from China.

In April 2001, UPS became the first U.S. cargo carrier to operate independently in China. It was also granted permission to fly directly from the United States to China. This has
huge implications for export-focused corporations in China because they can’t deliver their goods to Europe, Japan or the U.S. by truck. They can only move their products by air or by ship. Now they can enjoy the state-of-the-art services of UPS or MAERSK in China as they do in the U.S. or Europe.

Royal Dutch Shell has sold industrial lubricants in China since the early 90’s. In 1998 the company decided to pursue a nationwide marketing strategy, so it outsourced the work to EAC Logistics. This northern European company had been in China for just a short time and only had 135 employees. However, it’s small size allowed it to be flexible in dealing with local provincial regulations.

Small, nimble logistics firms could operate in a gray area of Chinese law. This is necessary because the Ministry of Communications in China governs trucking and other transport services. But logistics, unlike distribution, does not have a clear regulatory structure. For instance, no ministry controls warehousing. However, the logistics industry faces irritating local barriers in developing long-haul routes. Some provinces and municipalities make it so onerous for outside trucking firms to secure licenses that shipments must be offloaded at the border and reloaded onto the next jurisdiction’s trucks. The average freight distance by highway in China is only 58 kilometers, 8% of the U.S. level. So most of the small, dedicated logistics firms have managed to obtain a patchwork of local trucking licenses and thus attained a degree of national coverage. In this way, EAC established 11 logistics centers around China.

Many market-oriented companies who are lured by the huge potential of the Chinese market but hesitate to invest heavily in this uncertain area are following Shell’s logistics strategy in China.

3.2.3 Localization Model

As mentioned previously, logistics is very complicated in China because the Chinese market isn’t really one market broken into provincial markets. In addition, China’s size, the historic strength of regional supply chain barriers, central and local government regulations, and its fragmented infrastructure increase the difficulties foreign firms face.
To simplify the day-to-day problems of supply chain management, many foreign companies localize their supply chain management in China. They do this in two basic ways: either through a wholly owned supply chain or by using local outsourcing.

3.2.3.1 Wholly owned supply chain

A few prestige MNCs have received permission from local governments to establish distribution centers that in effect act as wholesalers for their production supplies. In such cases, the company can directly import the “components” it needs for its “manufacturing” process, and can then set up branch offices in other FTZs to sell the products, should it choose to do so.

Now these deep pocket MNCs, such as Intel, Nokia, and NEC, have built front- or back-end chip plants and distribution centers in China. Siemens (China) has established more than 40 operating companies. Ericsson’s (China) supply chain directly creates 30,000 job opportunities. Proctor & Gamble established a spin-off, PG Logistics, for its logistics business in southern China.

The extended regional supply chains are the backbone for MNCs’ long-term business success in China. The reason is that the localization of supply chains in China not only allows foreign companies to produce locally, but also helps them to be closer to the market, respond faster to customer demand and provide more effective on-site consultation and services. This includes pre-sales consultancy, engineering, installation and training, and maintenance, repairs and servicing.

3.2.3.2 Local outsourcing

With more companies looking to source products in China, local logistics providers have been developing quickly. For example, the largest Chinese ocean carrier COSCO and the largest inland carrier Sinotrans are developing intermodal and integrated service offerings and investing in port and infrastructure improvements. New services are now offered across the entire supply chain. These include raw-materials management and inland
transportation as well as packaging, bar coding, order-management and follow-up. Even carrier and/or supplier management services are being provided.

The key advantage local providers have compared to non-Chinese 3PL providers, is their strong relations with local or central governments. Sinotrans is a wholly owned enterprise of the Ministry of Foreign Trade and Economic Cooperation. With 67 subsidiaries and 48 joint ventures around China, Sinotrans is still the only 3PL provider in China who possesses a nationwide logistics services license. Motorola has outsourced its logistics to Sinotrans since 1995. Other local and regional 3PL providers also have their unique advantages in particular regions or particular industries. Many of them even seek to build personal relationships directly with government officials – which can prove valuable in expediting otherwise delayed shipments.

Of course, local 3PL providers also have some obvious disadvantages. For those governments wholly owned providers, they are more or less notorious for bureaucracy (Weeks, 2000). Another serious problem is that disparate organizational cultures and business philosophies cause friction in Sino-foreign alliances. Finally, all local providers currently lack cutting-edge technical support, such as tracking. Usually, once a shipment has entered the rail system, it is impossible to know where it is.

4.0 Lessons Learned

4.1 Two supply chain worlds in China

There are large disparities among regions and between export-oriented and market-oriented foreign firms, in terms of market needs, logistics needs, economic resources, infrastructure, as well as interpretation of regulations. In general, for export-oriented firms in coastal FTZs, they have efficient and simple supply chains, and enjoy high quality logistics services provided by world-class companies, such as UPS; for market-oriented firms within inland regions, they are facing more complicated supply chain issues.
4.2. Today’s challenge will be tomorrow’s opportunity

The current Chinese logistics industry is underdeveloped and historically prone to local protectionism or unfair competition. However, existing constraints can also be turned to opportunities by creating innovative solutions with “Chinese characteristics.” HAVI, the foreign pioneer in China logistics market, is reaping the rewards of setting up early. Now more foreign investors in China are waiting to join its growing client list. EAC (Royal Dutch Shell’s logistics provider in China) built their business from nothing. Recently, ASG Logistics paid extremely high prices to acquire EAC’s distribution networks in China.

4.3. Opportunities Abound

In fact, many rules remain to be written in the Chinese logistics market because of the many gray areas. Companies that are well connected with the right authorities and are socially responsible will stand a good chance at determining how those rules will be written (Gould, 2001). The more powerful the companies (such as MEARSK and UPS) are, the more easily the companies can approach their goals. However, small companies (such as EAC and Chinese regional players) can also play important roles in this “workshop of the world.” The relative immaturity of China’s supply chain system may provide a better chance for small players who are more flexible. In China, business is built largely on personal relationships. Small players, particularly those that offer value-added services, could survive by serving niche markets or long-established customers.

5.0 Future Prospects of China’s Distribution/Logistics

To determine where China’s distribution industry is going, one must understand the forces that are causing the change. There are three main forces that are changing and modernizing China’s distribution and logistics system. These are the booming economy, entering the WTO and e-commerce. All these forces have a common characteristic: they are tearing down the walls facing distribution and logistics.
The booming economy is tearing down the FTZs’ walls. This is because more export-oriented foreign firms, which have been focusing on the Southeast Pacific market, are turning around to focus on China’s inland market. China’s entrance into the WTO is tearing down the regulation walls since the Chinese government must phase out most restrictions affecting the sales, service, and distribution sectors to foreign firms by 2005. Finally, the advent of e-commerce is tearing down the bricks and mortar walls of physical distribution.

5.1. The Effects of a Booming Economy

China provides a low-cost export platform for foreign companies as well as a very large and growing market.

China last year surpassed the U.S. to become the world’s largest market for cellular phones and for beer. It already was No. 1 in a diverse array of other product categories, including motorcycles, elevators, light bulbs, cotton, and television. By 2003, the world’s most populous nation is projected to surpass Japan to become the second-largest market, behind the U.S., for personal computers, and it is on its way to becoming the world’s largest high-tech market by 2015. Beyond that, there are expectations that China will develop into a leading buyer of commercial aircraft, automobiles and insurance (Levine, 2001).

As Chinese consumer demand accelerates and becomes more sophisticated, consumers will require wider product ranges, improved quality and higher service levels. Because of this, demand for improved distribution and logistics capability will continue to rise.

Now many deep pocket MNCs, such as Intel, Nokia, and NEC, have invested heavily to establish their distribution centers/channels in China. Siemens (China) has established more than 40 operating companies. Ericsson (China) supply chain directly creates 30,000 job opportunities. Proctor & Gamble establishes a spin-off, PG Logistics, for its distribution and logistics business in southern China.
The inland-focused supply chains are the backbone for MNCs’ long-term business success in China. This is because localization of supply chains not only allows the foreign companies to produce locally, but also help them to be closer to the market, respond faster to customer demand and provide more effective on-site consultation and services. This includes pre-sales consultancy, engineering, installation and training, maintenance, repairs and servicing.

5.2. Effects of the WTO Entrance

The accession agreement for China’s entry into the WTO has opened China’s sales, service, and distribution sectors to direct foreign competition. It will still take until 2005 before the barriers to market entry totally removed. During this time, China has committed to the following:

- Foreign companies can distribute their products with their own warehousing and delivery facilities.
- The constraints on foreign equity will be removed (allowing 100% ownership).
- Logistics services such as local and international courier service, freight forwarding and distribution will be opened to foreign companies.

The opening of the sales, service, and distribution sectors to direct foreign participation is a critical element of greater market access that will be enjoyed by foreign companies. Distribution in China will be much simpler, and many firms may decide to go back to distributing their own products in order to collect direct feedback from Chinese consumers.

The easing of restrictions on the transportation and logistics industry should make China a more attractive place for foreign companies. The competition should then bring large cost savings to Chinese consumers. As mentioned before, many large multinationals in China have been forced to enter into multiple joint ventures. This has required multiple partners in different regions of the country in order to patch together a large-scale
distribution network. After China enters the WTO, the patchwork can eventually be replaced by one national license, thus reducing overhead costs.

5.3. Effects of E-Commerce

Today, China still lacks of some of the fundamental conditions to develop its e-commerce.

E-commerce is not all about the technology to allow customers to point and click. Rather, its key component is the ability to move products speedily and in a flexible way in order to meet the customers’ needs. The transportation infrastructure is China is not established to the degree to allow true e-commerce. While packages in the United States can be shipped cross-country in a matter of days, in China the delivery time would be weeks in all but a few key locations.

China’s immature infrastructure is not the only thing impeding the growth of e-commerce. The development of efficient payment and settlement methods has been hobbled by lack of both commercial and consumer credit rating systems, and lack of a central clearing facility for the fragmented credit and debit card communities. Much of this can be blamed on the lack of western style banking networks. Furthermore, there are deeply rooted problems of consumer confidence in remote transactions. Security, authenticantion, and certification systems are still under development worldwide, but are an acute problem in China.

On the positive side, however, is the growth in online usage within China. The China Internet Network Information Center (CNNIC), China’s official Internet data source, has been showing high growth rates in the number of e-commerce sites and Internet population for years. CNNIC statistics published in January 2001 for the end of 2000 put the Chinese Internet population number at 22.5 million. An update by CNNIC in July 2001 indicated China adding 4 million new users in the first half of 2001 (CNNIC, 2001). Nearly 70% sites of all Chinese web sites were established in the last two years and 95%
of them are corporate sites. Unfortunately, Figure 4 shows that most Chinese corporate sites are information platforms rather than a basis for business transactions.

![Figure 4: The Ratio of Services Provided by Chinese Companies Sites](image)

The slow and evolutionary pace of Chinese e-commerce is the direct result of its undeveloped distribution system. Western companies know that information flows are important in the whole distribution channel. As in physical distribution, China’s size and fragmented distribution channels slow the travel of information through the inefficient three-tire vertical channel or confines the information to the local range. Basic information that western firms take for granted is non-existent in many Chinese cities. For instance, in most major cities, a decent phone book is a rare commodity. In Shanghai, the only English-language phone book available is organized alphabetically by company name, not by type of business, and only includes some of the businesses in the Shanghai metropolitan area. In other industrial areas, there are no phone books at all – in any language (Gould, 2001).

However, the growth of the Internet in China does provide companies with a practical broadcast medium. A firm’s website can help the firm announce to all potential customers “who are we” and “what products we provide.” For example, Fengrun is a
small agricultural county in north China. In the summer of 2000, this county’s Agriculture Products Trade Company set up its website on the Internet. By the end of 2000, this firm sold more than US$2 million worth of goods to 340 wholesalers, including 7 Japanese agriculture products import firms. This was almost eight times the amount of their provincial competition.

This is just a small example of the potential that the web offers in liberating information flows in China. The easier and wider the availability of information is, the easier it will be to support physical product flows. This is turn will help identify the bottlenecks in physical delivery and increase the pressure to provide efficient logistics capabilities. This accumulating pressure should accelerate the reform of physical flows. Thus e-commerce has a part to play in reforming China’s distribution system.

6.0 The Future

Since the beginning of economic reform, the Chinese government has been encouraging export-oriented foreign investment in manufacturing and technology. The logistics infrastructure has been built around an export mind-set. This is the main reason why you can find advanced infrastructure systems along the Chinese coast but you find only meager infrastructure systems inland.

Export-oriented foreign companies are currently enjoying a reasonably good logistics infrastructure, low-cost production, and streamlined supply chain within China’s FTZs (Child and Tse, 2001). These areas should continue to see an increased amount of investment in the near term. In addition, companies that had been built up in British Hong Kong, are now leveraging their understanding of Western business practices. For example Victor Fung, of Hong Kong’s Li & Fung, sees the company as part of a new breed of professionally managed, focused enterprises. These firms will leverage their knowledge of distribution-process technology information technology, product
development, sourcing, financing, shipping, handling, and logistics as well as their connections within mainland China (Magretta, 1998).

In the future the booming economy and WTO entry will attract more foreign investments. The Chinese government is trying to steer some of these investments into infrastructure improvements in the inland areas. The West China Development Strategy provides special government benefits to those firms that invest in infrastructure improvements in particular areas. The hope is this program will dramatically improve the distribution and logistics infrastructure of the inland provinces.

Under the WTO, severe restrictions on foreign companies’ distribution rights should be removed over the next several years. In the short term, local players will still force most foreign competitors to work in FTZs or within legal gray areas. In three to four years, however, the barriers to distribution and logistics services market entry should be lifted totally. Then powerful MNCs, such as UPS and MAERSK, will probably dominate the nationwide distribution business in China due to their previous investments.

However, the relative immaturity of China’s supply chain system may provide a chance for small local players. Because provincial business is built largely on personal relationships, local players could survive by serving niche markets or long-established customers. They may also be able to expand by providing local value-added services.

Table one provides a perspective on supply chain players in China. There are two main groups. The first one is largely made up of global supply chain players supporting MNCs in China. The second consists of domestic players supplying small to midsize foreign companies and local companies.
The next few years will determine the new landscape of China’s supply chain. Since both foreign and Chinese firms have the same logistics and distribution problems, they will exert significant competitive pressure on local and foreign supply chain service providers to improve their existing business models and force increased integration in the value chain.

Table One: Supply Chain Players in China

<table>
<thead>
<tr>
<th>Players</th>
<th>Active Region</th>
<th>Customer</th>
<th>Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Suppliers</td>
<td>Free trade zones</td>
<td>MNCs</td>
<td>Long-term partner</td>
</tr>
<tr>
<td>(export-oriented)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Original Suppliers</td>
<td>Nationwide</td>
<td>MNCs</td>
<td>Long-term partner, can reach end consumer</td>
</tr>
<tr>
<td>(market-oriented)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Established Foreign</td>
<td>Stepping up on</td>
<td>MNCs</td>
<td>Cutting-edge services</td>
</tr>
<tr>
<td>3PL Suppliers</td>
<td>expansion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Foreign 3PL Suppliers</td>
<td>Nationwide</td>
<td>MNCs and foreign firms</td>
<td>No culture conflict, nimble, can work in gray area</td>
</tr>
<tr>
<td>Suppliers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholly Owned Suppliers</td>
<td>Nationwide</td>
<td>MNCs</td>
<td>Total control, can reach consumers</td>
</tr>
<tr>
<td>Sinotrans</td>
<td>Nationwide</td>
<td>A few MNCs and lots of foreign and local firms</td>
<td>Seamless national networks, strong ties with governments</td>
</tr>
<tr>
<td>Local Regional Suppliers</td>
<td>Regional</td>
<td>Foreign and local firms</td>
<td>Strong ties with local society and business, very nimble</td>
</tr>
</tbody>
</table>

Table One: Supply Chain Players in China
The result will probably be industry consolidation and introduction of more professional service providers – the majority of which will likely be located in the major provinces. Nationwide, the established foreign operators and larger government-related operators will play a greater role.

7.0 Conclusions

Distribution is widely regarded as one of the most critical determinants of business success in China today. Both foreign and domestic firms face similar difficulties. These include China’s overburdened, underdeveloped physical infrastructure; inexpert, underfunded state-owned distribution companies; unbalanced economy development; enormous, fragmented distribution and logistics sector; and regional protectionism. Beyond these, foreign firms also face bureaucratic restrictions that prohibit them from legally importing, selling, and servicing products in a straightforward manner.

The market forces that will drive changes, however, are already in evidence.

Many successful export-oriented foreign companies are moving quickly to exploit China inland market. To reach more end consumers in China, these firms are working hard to establish or outsource their necessary distribution channels.

China’s acceptance into the WTO is an endorsement of its entry into the global economy. It implies that laws governing international business operations will become effective in China. This lowers both the financial and operational risks faced by foreign firms and it encourages their participation in the Chinese economy. In turn this participation increases the scale of China’s business services market, and encourages more international supply chain service providers to recognize China as a key market.

Information flows, spurred by e-commerce, should bring pressure on current distribution systems in China. The strong demands of distribution and logistics services should lure greater investments into the distribution and logistics sector.
These forces will not immediately change all of China’s distribution troubles. It will take years to upgrade China’s physical infrastructure and expand it into inland areas. But we can safely say the revolution of China’s distribution and logistics network has begun.

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