China's Evolving Logistics Landscape

McKINSEY & COMPANY, GREATER CHINA OFFICE

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Preface

This document is the result of an effort by McKinsey & Company's Greater China practice to assess the impact of China's upcoming accession to the World Trade Organisation on the country’s logistics and transportation sector, a sector that will play a key role in China’s ongoing economic expansion.

In this white paper, we present an overview of China's logistics and transportation sector, including recent developments in the area, describe the impact of current economic growth on the sector and outline a perspective on approaching the market in ways that increase the chances of success.

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Those seeking specific advice relating to the topics discussed in this white paper should direct their inquiries to Stephen Shaw, a senior partner in McKinsey & Company’s Hong Kong office, or Staffan Hertzell, a senior specialist in Transport and Logistics in our Brussels Office.

China's Evolving Logistics Landscape

Economic reforms in China have already brought far-reaching change to many sectors of its economy. Now, it's the turn of the logistics and transportation sector: ongoing economic growth and China's upcoming entry into the World Trade Organisation could very well transform this currently underdeveloped sector. While growth is stimulating demand, WTO-entry promises significant spillover effects on the sector from the further expansion and opening of the economy. A rapid expansion of the sector is clearly on the cards.

Already, the Chinese government has named logistics a strategic industry and has committed to promoting investment in a number of logistics centres across the country. Retail channels are consolidating and modernizing in the top tier cities, China's major consumption centres, and spreading to the next tier of cities. Express highways linking the major cities are being completed and professional truckers are emerging.

Seeing the emerging opportunity, newly established and incumbent service providers are aggressively moving to provide upgraded logistics and transportation services. Today, players in the sector include state-owned enterprises (SOEs), local or joint-venture third-party logistics firms, foreign entrants and emerging domestic players in manufacturing and distribution.

But capturing the emerging opportunities will not be easy. Apart from the usual challenges of building relationships and networks, players may face policy shifts, due to social or other compulsions, or come up against local protectionism that often results in big gaps between central government policy and local practices.

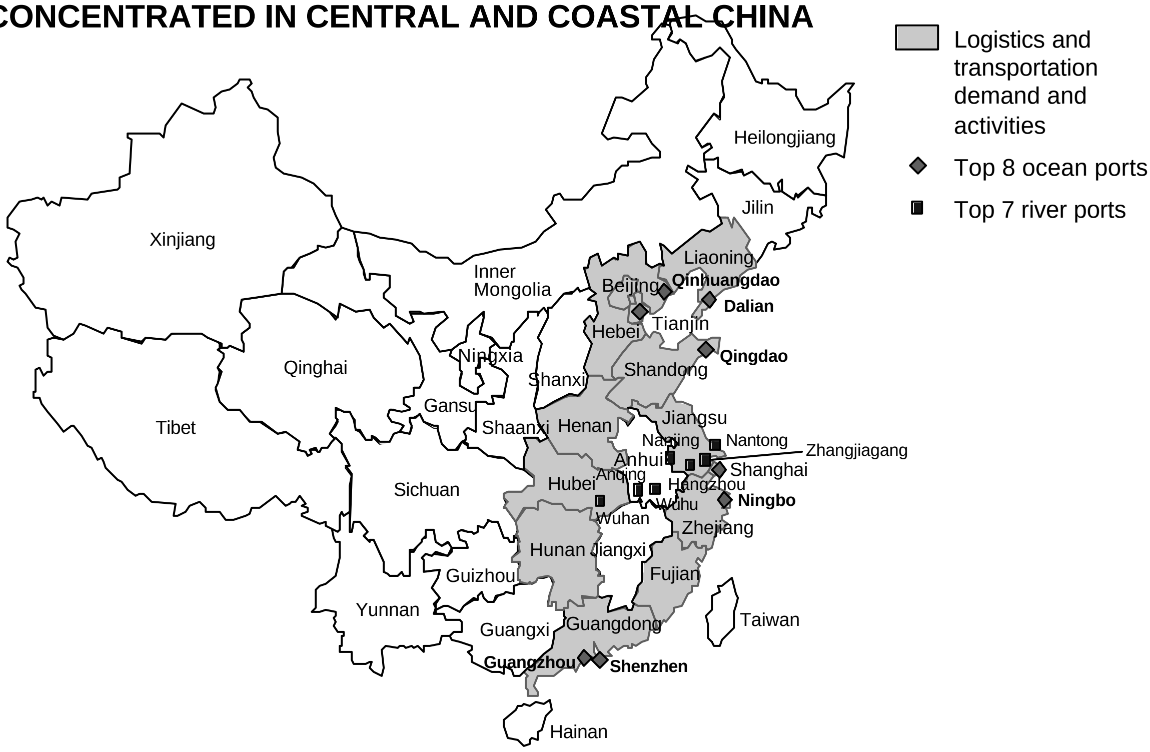
Broadly speaking, players should look for opportunities in two main areas: efficient, networked transportation and warehousing services and true third-party logistics solutions. Those that move fast enough, have tolerance for high risk, and build on their unique strengths will eventually triumph, given the relatively basic nature of the logistics and transportation sector today.

LOGISTICS SERVICES HAVE REMAINED ELEMENTARY

Until now, the Chinese market for logistics and transportation has remained fairly underdeveloped. Local companies have had neither the desire nor sophistication to seek real logistics solutions. Most Chinese manufacturers have remained a fragmented lot, part of a cellular economy with limited, local distribution areas. In fact, logistics demand has remained restricted to the central and coastal provinces, around the major cities of Guangdong, Shanghai and Beijing/Tianjin, where cargo movement and industry output are highly concentrated, which have the top 8 ocean ports and the top 7 river ports in China, and whose people enjoy some of the highest per capita incomes in the country **(Exhibit 1)**. While import/export activities and some freight forwarding have traditionally been undertaken by state-owned players like Sinotrans (China National Foreign Trade Transportation Corporation) or Cosco (China Ocean Shipping Company), most domestic logistics and goods transport needs have largely been met by the SOEs themselves, as they have historically owned and operated their own trucks to deliver goods downstream to distributors and wholesalers. These distributors and wholesalers in turn have bought the finished goods and moved them to consumers through a highly antiquated and fragmented retail trade.

Exhibit 1

LOGISTICS AND TRANSPORTATION DEMAND AND ACTIVITIES ARE CONCENTRATED IN CENTRAL AND COASTAL CHINA



Source: China Statistics Yearbook; Government Industry Statistics Yearbooks; Provincial/City Yearbooks; Beijing Huatongren Market Research

Not surprisingly, transportation and transport-related services serving domestic needs have remained rudimentary, as described below.

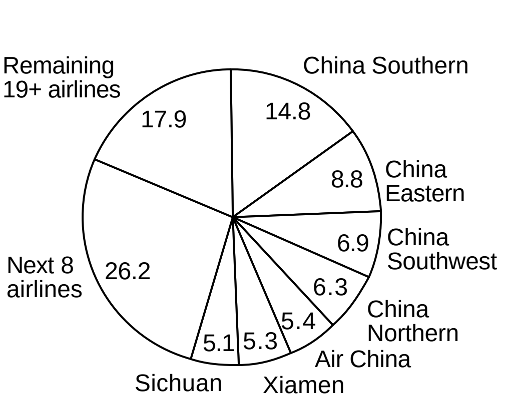
- **Shipping:** Shipping within and across China is suited mainly to the transport of commodities—it is very rarely a good solution for distributing finished goods mainly because of the large scale of bulk and container ships and the low frequency and inflexibility of schedules of this transport mode. In China, domestic shipping takes place along the two major rivers running from deep inland to the coast and so is not particularly useful for the largely coastal-oriented economy. Services from one coastal port to another are relatively underdeveloped. For high value or time-sensitive finished goods, shipping cannot really compete with other transport modes.

- **Airfreight:** Airfreight may have greater potential in the future, but its use can be problematic today **(Exhibit 2)**. Two main difficulties are that airlines and air routes within China are highly fragmented and that most airlines focus heavily on the passenger, not cargo, business. Cargo planes make up less than 20 percent of China's aircraft, and the belly space of passenger aircraft is poorly utilised since domestic air routes can be circuitous and infrequent and inefficient information exchange between airlines and freight forwarders can make coordination and delivery a nightmare. But the bigger problem is the lack of an effective supporting ground-based network. While China does have freight forwarders, due to lack of demand or of insight, they rarely provide well functioning supporting services such as local pick up and delivery, as their counterparts in developed economies very often do. And while parcel post service is available, it meets only a small fraction of most manufacturers' needs for delivery of time-sensitive items.

Exhibit 2

AIR ROUTES ARE FRAGMENTED AND SERVICE IS POOR

Airlines' share of air routes, 2000
Percent



"Airlines have traditionally ignored the cargo business – belly space is an afterthought for airline managements."
– *Airline executive*

"The lack of a strong network of air freight forwarders, and their poor organization makes using air very troublesome in China. For example, airfreight forwarders generally don't have local pickup and delivery services, even in the big cities."
– *Electronics company executive*

"The fragmentation of airlines, their poor schedules, and their poor e-commerce capabilities make coordinated booking and scheduling of airfreight a nightmare. We have pretty given up on this as a way to move goods domestically."
– *Computer company executive*

Source: CAAC; interviews with industry executives

- **Rail:** Rail also has severe limitations as a mode of transporting finished goods **(Exhibit 3)**. While it is the lifeline for moving critical commodities such as coal, minerals, and grain, it is unsuited to moving most manufactured finished goods because the rail system is delay-ridden, has very little flexibility, and lacks a genuine service orientation. Like airlines, rail services are also increasingly focused on the passenger business, leading to neglect of the 'valuable items' freight business. Another constraint to moving goods by rail is that very few manufacturing plants in China have rail sidings and ports often lack modern and efficient rail sidings as well. Since trucks must be used to get goods to and from the rail system, it often makes more sense to use trucks for the entire journey.

Exhibit 3

RAIL SERVICES ARE UNSUITED TO MOVING FINISHED GOODS

Problems	Description
Damaged goods	• The damage rate in rail carload/less-than-carload can be 2~3 times that of trucking • Much of the damage occurs during handling at either end
Delays/ uncertainty	• On less congested routes, one week arrival window • On congested routes, four weeks arrival window
Lack of information	• Minimal shipment tracking • Routine failure to notify shipper when cargo has arrived
Poor track infrastructure	• Rail routes mostly in place, but lacking in certain regions, e.g., between Guangdong and Fujian • Significant amount of network not yet double-tracked
Long booking lead time; poor availability	• For less-than-carload, two weeks advance booking is required and minimum requirement is 10 tons • For full carload, service is constrained by long-term agreements for many bulk shipments (coal, iron ore, etc.)

Source: Interviews with Chinese transport executives

- **Trucking:** This mode of transport in China also suffers from considerable limitations. In the future, however, it promises to be the best mode for land-based logistics solutions, as is the case in most mature economies. Trucking has remained largely a cottage industry in China due to a number of structural factors. Historically, production enterprises have provided their own ground-based transportation services, as required in a planned economy in which the notion of hiring such services was not well developed. Since manufacturing companies owned the trucks, their usage remained very inefficient, and their management unprofessional, and, trucking services for hire remained limited to informal leasing of a few vehicles at a time to 'unofficial, local operators'.

  But the biggest constraint to the development of modern trucking networks and effective collaboration among truckers has been local protectionism. Local governments in China think it very important to protect their local economies by limiting the entry of trucks carrying goods from other regions. To do this, they set up complicated regulatory requirements on transport services and stringent border controls **(Exhibit 4)**. To illustrate: many cities will not allow trucks to enter without a tedious licensing and registration process. As a result, many trucks traversing provincial borders become restricted to hauling goods only one way. While a main aim of local authorities is to control the flow of goods between provinces or regions, one consequence is the thwarting of the development of modern trucking networks. Another issue with trucking is the heavy cost burden imposed by toll roads: tolls amount to as much as 20 percent of the truckers' cost structures in China. This mode of transport has thus remained unreliable in timing and expensive.

Nevertheless, given the flexibility it offers, trucking is still the mode of choice for most finished goods producers supplying domestic markets and is likely to remain so in the future.

Exhibit 4

TRUCKING SUFFERS FROM COMPLICATED LICENSING AND LOCAL PROTECTIONISM

Required licensing processes

Processes	Authority	Requirements
National truck operation licence	Ministry of transportation (MOT)	Required for every service provider
Provincial operation licence	Provincial government	Required in the province of origin
Local truck title	Local city transportation bureau	Needed for truck purchasing and registration (e.g., in Shanghai)
Local truck operational licence	Local police authority	Required for providing transport services within a city

"Many cities will not allow trucks to enter without a tedious registration process. Did you know a Tianjin truck cannot enter Beijing without waiting hours in line to register for a temporary delivery permit?"
– Freight Forwarding Executive

"If your truck is not a local truck, local authorities will often go out of their way to fine and detain you"
– Freight Forwarding Executive

"Even with permission at the national level, local regulations prevent us from operating in many regions"
– Major Port Handling Executive

Source: Interviews; literature search

- **Warehousing:** Warehousing in China barely meets customer needs. General infrastructure is poor: most warehouses are poorly designed and have manual handling of goods. This hampers operations—their low ceilings cannot accommodate automated machines, for example—and often damages goods. Most warehouses cannot cater to special requirements since they lack humidity control and cold storage and even facilities to store goods separately to avoid contamination. Inadequate management, such as a lack of information-based inventory management, is another issue. Manufacturers and distributors are faced with high discrepancies in actual and recorded inventory data, a high ratio of missing items, and a general lack of real-time product or order tracking. These deficiencies in warehousing have led manufacturers, particularly foreign ones, to build their own facilities.

Logistics and transportation services have historically been provided, for a fee, by a few major SOEs with government-granted monopolies (or near-monopolies) in rail, shipping, freight forwarding, etc. Examples of these dominant, asset-intensive players are Cosco (shipping), Sinotrans (air freight forwarding, shipping), China Post (mail and parcel post) and CMST* (warehousing and trucking). A few new local or foreign-local joint ventures have tried to offer very limited solutions to specific industries, with some IT services and coordination of basic transport services. Examples are ST-Anda (serving beverages and packaged foods companies), PG Logistics (fast moving consumer goods), and EAS (electronics). Foreign entrants have for the most part been thwarted by the tough policies barring foreign ownership of distribution and transportation assets, their low ability to gain true operating control of critical assets for instance in trucking, and significant local barriers.

These players and their continuing evolution are described in more detail in the section 'Competitive landscape'.

The situation began improving, even if marginally, when multinational companies with operations in China started seeking logistics solutions to manage domestic distribution and imports/exports. Third-party logistics contracts of two main types resulted. On the one hand, import/export-oriented contracts in complex assembly industries such as electronics and automotives emerged often as part of global arrangements. On the other, local contracts to handle domestic distribution from plants to city level distributors or major retail points also developed.

All logistics customers however continue to face a number of frustrations in moving their goods to distributors and retailers. They cite five major drawbacks:

- Loss, damage or pilferage of goods: Both rail and trucking involve a lot of human handling. In the process, goods are misplaced, damaged or stolen. Increasing containerisation of trucks is easing the problem but about 60% of all trucks in China are still open-bed trucks.
- A lack of reliability in delivery and pick up time.
- A lack of transparency in the shipment process: In China, until goods show up at their destination, manufacturers have almost no information about their whereabouts.
- Lack of control in marketing/sales: Manufacturers relying on arms-length distributors generally have no idea how and when an end sale occurs. With strong competition between distributors, goods can end up at unintended destinations or be sold at unfavourable prices, despite attempts by manufacturers to curb cross-regional sales and to develop and maintain brand positioning.
- High logistics costs: The lack of effective transport networks increases distribution costs, thus decreasing profit margins. In China, transportation and warehouse costs can amount to 30-40 percent of the total costs for manufactured goods, more than 60 percent for food and livestock, and around 70-80 percent for certain chemical products. On average, both inventory and delivery times exceed 30 days, a striking

* China Material Storage and Transportation Company

divergence from the most advanced practices. The problems are particularly acute for many over-crowded sectors in China, such as consumer electronics and home appliances. Facing white-hot competition and continuous price wars, they are in desperate need of logistics efficiency improvements.

For these and other players, however, relief may be at hand. Like nature, markets hate a vacuum and gathering market forces are now compelling many players (with significant encouragement from the government) to fill the gaps in China's logistics and transportation market.

STRONG FORCES ARE RESHAPING THE LANDSCAPE

The recent acceleration of economic reforms has proved a strong force for change in China. Its direct outcomes, economic development and market growth, are increasing demand for logistics and transportation services. In addition, by changing regulation and encouraging investments in infrastructure, the government is playing a key role in further stimulating demand for logistics and transportation.

Economic development and market growth

Increased economic development and income growth in China has expanded the market for consumer goods to secondary and even tertiary cities. The geographic market has thus progressively expanded from around five cities to 15 to 20 and then 30 to 40 cities, increasingly inland and to the northeast but still concentrated along China's east and south coast. Given the large populations and increasing spending power of these regions, manufacturers are now looking for practical solutions to reliably move their goods to these attractive markets.

Due to increased competitive intensity because of the multitudes of local companies in many industries, a clearly emerging trend towards consolidation can be seen in many of China's industries. In air conditioners, the number of players has fallen from over 400 in 1996 to 90 by 2000 and in refrigerators from almost 200 to less than 40, over the same timeframe. In colour televisions, the top 6 players have increased their market share from 35 percent in 1994 to nearly 75 percent currently. Finally, consolidation is also gaining ground in the beer industry, as the hectic acquisition activity of the top four brewers shows **(Exhibit 5)**. This consolidation has been accompanied by the emergence of many national brands **(Exhibit 6)**, which require national (or at least, multi-regional) distribution coverage, with all the logistics and transportation complexity that this entails.

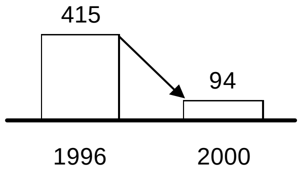
Retail channels in China are also consolidating, reflecting retailers' pursuit of more purchasing power vis-à-vis suppliers and the preference of consumers for larger, more appealing stores offering choice assortment, low prices, and strong brands. The emergence of large chain stores and hypermarkets in China bears out this trend **(Exhibits 7)**. Just one consumer appliance chain store, Guomei, more than quadrupled the number of its stores from 7 to 30 in just two years (1998 to 2000), and is projected to expand to some 80 stores by 2002. In the process, it will expand its presence from Beijing to Shanghai and several second tier cities, including a number in northeast and southwest China. Growing sales from such large chain stores, including Guomei, will likely make up about 20-30 percent of the total retail sales of home electric appliances in China by 2003. In other words, while the traditional trade in China still cannot be ignored, today, modern retailers are making real inroads in the first, second and even third tier cities, creating a greater need for specialized logistics solutions to serve these outlets.

Exhibit 5

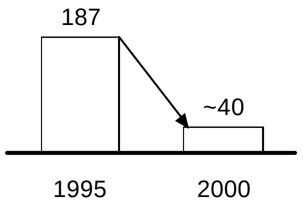
MAJOR CHINESE INDUSTRIES ARE CONSOLIDATING

Reduced number of competitors

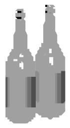
Air conditioners



Refrigerators



Consolidation by leading players

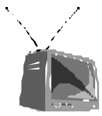


Beer

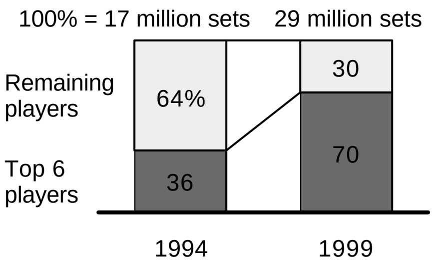
Acquirer	Year	Acquired companies
Qingdao	1998-2000	10+ companies, e.g., Jixi, Shenzhen, etc.
Yanjing	1999-2000	4 companies, including Ji-An, Hunan
Harbin	1997-99	4 companies, including Hegang, Yuquan
Pearl River	1997-98	4 companies, including Luquan, Jintai

Shifts in market shares

Percent



Color TVs



Source: Literature search; industry reports; McKinsey analysis

Exhibit 6

CHINESE NATIONWIDE BRANDS ARE EMERGING

Industry	Product	Brand
Consumer electronics/ appliances	• Electronic appliances, general	• Haier
	• Air conditioners	• Kelong • Midea
	• Washing machines	• Little Swan
	• Refrigerators	• Rongsheng
	• TVs	• Changhong • TCL • Konka
	• Computers	• Legend
Beverages	• Rice liquor	• WuliangYe • Gujinggong
	• Beer	• Qingdao • Yanjing
	• Wine	• Dynasty
	• Soft drinks	• Lulu
Pharmaceutical	• Pharmaceuticals	• 999 • Xinhua • Baiyunshang
Tobacco	• Cigarettes	• Hongtashan

Source: Beijing brands appraisers, *Media* March-April 2001

Exhibit 7

MODERN CHANNELS SUCH AS HYPERMARKETS ARE GROWING

Leading Hypermarkets	Ownership	Number of stores (2000)
Carrefour	French joint venture	27
WAL★MART	USA	14
Yuexin/Beatrice	Domestic	14
Lotus	Thai joint venture	12
Daoneijia	Domestic	10
Metro AG	German joint venture	8*

Projections from publicly available data on planned expansions of these chains show at least a 17% p.a. growth of stores in the next 5 years

Source: Literature search; *China Hand*; McKinsey analysis

All these factors are reshaping demand for more extensive, reliable distribution solutions. Faced with increasing competition and falling margins, manufacturers are paying a lot more attention to optimising distribution and their overall supply chains. Their need for sophisticated solutions is making them more and more open to third-party logistics and transportation services. Traditional and emerging providers have been trying to respond, intensifying competition and leading to a rapid evolution of the sector, as we will show later.

The government's role

The Chinese government's actions are stimulating the development of the logistics and transportation sector in several ways. For one thing, the agreements the government has made as part of the conditions for entry into the World Trade Organisation (WTO) will open the sector to foreign participation over a three-to-four year timeframe. For another, the government is itself investing in infrastructure and encouraging change in the industry's structure that will augment logistics solutions.

China's entry into the WTO will stimulate the development of logistics and transportation services in two ways. First, it will pave the way for new, often foreign, investors to collaborate with incumbents, who own most of the hard assets. Recognising the antiquated and underdeveloped state of the sector, the Chinese government has given it priority for development. As a result, asset-heavy incumbent companies are now actively looking for know-how, opening up opportunities to work with them.

Second, as noted above, WTO entry will open up several logistics and transportation sectors to direct foreign participation. Foreign companies will be allowed to own 100 percent of Chinese freight forwarding, third-party logistics and customs brokerage firms, as opposed to roughly 50 percent now, within four years of WTO entry. They will be allowed to fully own trucking companies within three years of WTO entry and rail services within six years. Domestic express and air parcel services, which are currently government monopolies, will be opened to 100 percent foreign ownership within four years of WTO entry. Areas that will remain restricted are maritime trade and shipping, in which only minority foreign ownership will be allowed, and air cargo, on which there is currently no draft agreement we are aware of.

Importantly, opportunities will arise as SOEs accelerate their restructuring, which many embarked on aggressively in the late 1990s. As they shed non-core interests and assets to focus resources on their core businesses, many will spin-off their in-house transportation departments and outsource these requirements **(Exhibit 8)**.

Exhibit 8

SOE RESTRUCTURING IS CREATING OPPORTUNITIES FOR OUTSOURCING

Restructuring of Eastern Pharmaceutical Group, 1990s

From		**Restructuring initiatives**	**To**
• Core business	– Traditional SOE – 10 companies – 8 plants – 11 manufacturing plants	• Transforming non-core activities into independent companies to focus on core business • Adopting shareholding structure	• Efficiency and profit-driven company focusing on core business • Independent transportation and logistics service company • Independent service companies under private management
• Non-core activities	– Transportation and logistics department – Cafeteria – Kindergarten – Natural gas station – Employee hospital		

Source: Literature search; McKinsey analysis

China's logistics and transportation sector will also benefit from government policy and investment in developing the sector **(Exhibit 9)**. The government aims to increase outsourced logistics in SOEs' manufacturing and distribution functions, create sophisticated logistics centres and networks by promoting the consolidation of and collaboration among logistics companies, actively encourage manufacturers to adopt supply chain management through third-party logistics firms, and reduce logistics costs. Given the increasing demand, the growth of China's third-party logistics market is likely to reach 20-30 percent a year in the coming years.

Exhibit 9

CHINA STATE DEVELOPMENT PLAN 2001-05 – LOGISTICS

Strategic aspirations

- Reduce logistic cost by 2% of GDP
- Actively explore 3PL in supply chain management and gradually increase outsourcing, distribution
- Encourage improve service quality, infrastructure, and management skills of logistics service providers
- Promote consolidation and alliances among logistics companies to improve scale and service quality

Detailed targets

- Foster a group of leading third-party logistics providers
- Encourage domestic companies to increase outsourcing to 50%
- Establish several nationwide multi-modal transportation networks for distribution
- Establish several core bases for nationwide logistics with the aspiration to become leading centres in Asia
- Establish many logistics and distribution centres in large and medium cities and near major production, distribution and transportation centres
- Approve 30 modernized product distribution and logistics centres as exemplary projects

Source: Guidelines for the Tenth Five Year Plan; State Planning Dept.; State Economic and Trade Dept.; *China Economic Daily*

To achieve these ends, the government will seek to foster and help promote a group of third-party logistics providers, establish several nationwide multi-modal transportation networks, some large-scale, modernised logistics and distribution centres, and several core logistics bases (which might then become centres for Asia-wide logistics) and approve around 30 modernised product distribution and logistics centres as spearhead projects. A related, and noteworthy initiative in transportation is the construction of a national trunk highway linking the major consumption centres, all cities with populations over 1 million and most cities with populations over 500,000 **(Exhibit 10)**. To be constructed in stages, the project is to be completed by 2010.

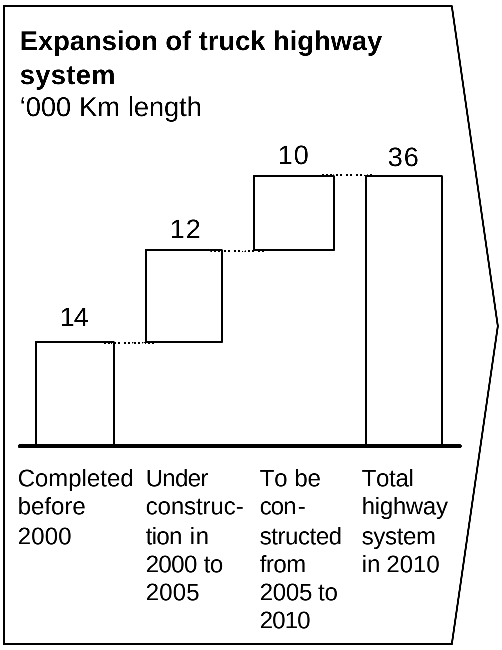
Clearly, opportunities in logistics and transportation in China are likely to increase in the next five years. But all players seeking to capture these opportunities will have to contend with existing providers who are now rapidly ramping up their aspirations and initiative-taking.

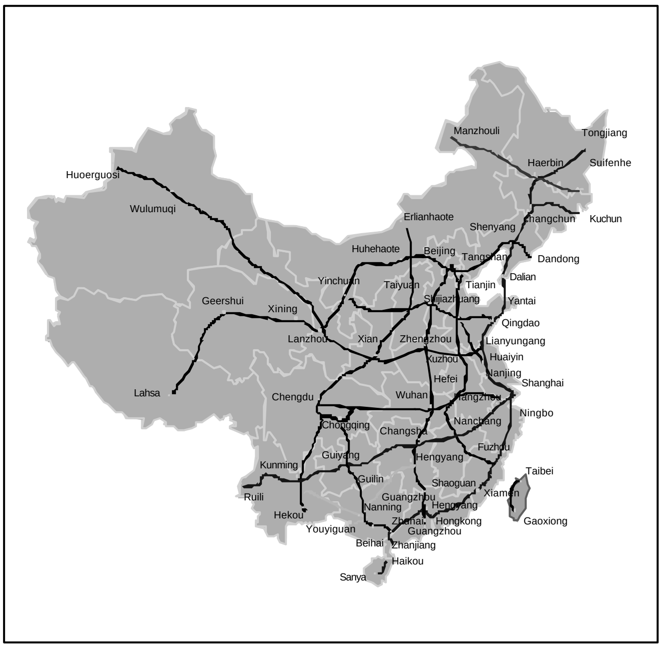
The evolving competitive landscape

Broadly, we see four types of existing service providers in China today. In their own way, they all seek to become logistics leaders in China.

Exhibit 10

A NATIONAL TRUNK HIGHWAY LINKING MAJOR CONSUMPTIONS CENTRES IS BEING CONSTRUCTED





Source: Xinhua News Agency; EIU; literature search; McKinsey analysis

As mentioned above, large SOEs such as Sinotrans, Cosco and China Rail have massive asset positions and strong relationships with traditional SOE manufacturers and other local enterprises. Their existing advantages make them formidable competitors **(Exhibit 11)**. But their ability to manage and develop their networks in a cost-effective and efficient way on their own is very limited, making them currently open to partnership and other cooperative arrangements with leading foreign third-party logistics companies who have real technical, operational, and solutions know-how. They may also view potential foreign partners as capital providers, and in fact, many are hoping to make public offerings. All have initiated plans to restructure themselves from providers of basic services to providers of real, third-party solutions **(Exhibit 12)**.

Local players or joint ventures between local and foreign companies, such as ST-Anda, EAS and PG Logistics, are other sound players with a fairly strong, albeit relatively small, market presence. These local or 'semi-local' companies have often been started by managers who have left SOEs and have successfully knit together enough basic transport services and management systems to provide workable solutions for specific industries such as fast-moving consumer goods or certain consumer durables. But very few of these companies have the ability to handle direct distribution to the highly

Exhibit 11

SOE LOGISTICS PLAYERS ARE FORMIDABLE COMPETITORS

Key companies	Strengths	Weaknesses
• Sinotrans • COSCO • China Post • China Rail • CMST	• Extensive transport network in China • Brand companies • Favourable relationship with and treatment from governments • Huge assets and attractiveness to large external funds	• Intrinsic SOE mindset • Geography-based organisation or mode-based management, leading to fragmentation • Heavy concentration on single transport model product type – Burdened with heavy assets, or – Assets too specialized to meet high-quality, multi-modal service demands • Inadequate management skills – Sales/marketing – IT management • Brand does not denote quality

Source: McKinsey analysis

Exhibit 12

CHINA'S LOGISTICS PLAYERS HAVE HIGH ASPIRATIONS

Leading players	Aspirations
• **Large SOEs** – Sinotrans – COSCO – China Post – CMST	• Determined to become leading logistics providers • Have initiated restructuring plans to transform themselves from basic service real third-party logistics providers • Consider their huge assets and wide networks as key advantages over new entrants • Have expressed concerns over deregulation and WTO
• **Local players and joint ventures** – ST-Anda – EAS – PG Logistics	• Aspire to maintain high growth rate and leading position in future third-party logistics market • Enjoy integrated organisational structure • Confident about superior service quality vis-a-vis SOEs
• **Foreign players** – APL Logistics – Danzas	• Consider China to be the biggest logistics opportunity in Asia • Have obtained key licences for logistics operation in China • Actively expanding in China via alliances
• **Non-traditional new entrants** – Haier Logistics	• Have ambitions to enter logistics market • Have transformed in-house distribution division into independent logistics service company • Have formed alliance with incumbent players, e.g., China Post • Are considering building wide network

Source: Literature search; interviews; McKinsey analysis fragmented traditional retail trade across China's cities, and many are struggling to keep up with ever-increasing demands for better solutions across a broader business and geographic scope. For these companies, the future lies in learning how to provide superior solutions, and accessing superior talent and investment to keep growing, while continuing to meet the needs of their customers. The joint venture firms typically offer superior services compared to the local entrepreneurial players, and are often involved in assisting the growth of the modern retail trade in China's top cities.

Non-Chinese players, such as Danzas, APL Logistics, Exel and Inchcape serve primarily multinational companies, generally in export- and import-related logistics. A few have tried to set up specialised services extending from their core business, for example, OOCL's specialised bonded rail links from ports to a few selected inland cities. Port-based consolidation or de-consolidation with customs brokerage are often primary offerings of this type of player. They pose a threat to other types of competitors through their greater capabilities, strong overseas networks and international customer relationships and, for the time being at least, a superior ability to attract top Chinese talent seeking work experience and development in top multinational organisations.

Increasingly, non-Chinese players are trying to expand on two fronts: (1) piecing together workable multi-modal transport services in China and linking these into their already strong global supply chain networks, and (2) developing workable domestic solutions for their largely multinational clients. They are also trying hard to develop total supply chain solutions for the most advanced Chinese manufacturers, but currently with very limited success due, no doubt, to their weak relationships with local customers and limited outsourcing by local companies.

Finally, a number of new players from the manufacturing and distribution sectors are entering the logistics sector. An example is Haier Logistics, which has transformed its in-house distribution division into an independent logistics services company and formed an alliance with China Post. The emergence of such new players is the direct result of the frustration of the better local manufacturers with the constraints on their own logistics and transportation activities in China. But they are also emerging because they see the opportunity for national distribution networks and feel they have the capability to build effective ones. The questions are "In how many more industries will this be the case?" and "How will they acquire the expertise to make their businesses work well?"

CHANGES AFOOT MAY BRING LUCRATIVE OPPORTUNITIES — BUT NOT FOR THE FAINT-HEARTED

The changes ahead certainly promise to make a backward and embryonic sector of the Chinese economy much more appealing for new investment and modernization. True, the sector has well-established local incumbents with entrenched asset positions and customer relationships, as do many other industry sectors in China. But these incumbents lack sophisticated operational know-how, investment funds to modernize, and the ability to attract, develop and retain top talent. Many appear to be massive SOEs but, in reality, are generally loose confederations of locally-run organisations that may not embrace a new, top down strategy. While these companies struggle to reinvent themselves, new entrants, local and foreign, have a significant window of opportunity. As always, there are obstacles to success. But companies that approach the market in the right ways should be able to overcome them.

Three broad areas of opportunity

Three broad areas of opportunity deserve careful attention over the next two to four years, as the WTO agreements kick in.

The first is to create truly effective domestic transportation networks in China, or at least in key parts of the country. For example, companies that can navigate the many local barriers to create a truly dependable, flexible less-than-truckload (LTL) or full-truck-load (FTL) domestic trucking service should have no trouble finding takers. Compared to the very poor service standards of current operators, a premium price could very well be charged. Similarly, a truly networked, efficient, and transparent 'last mile' delivery service to a large number of retailers covering numerous major cities in China would be a unique offering, with little real competition. Numerous distributors and manufacturers are likely to flock to such a service.

The second opportunity is in offering true supply chain optimisation services to major Chinese manufacturers, distributors and retailers. To be sure, not all these companies in China are ready to outsource supply chain management. But we expect that an increasing number is prepared to try out well-equipped service providers, given the competitive pressures they face in their own marketplaces. Even the best local manufacturers and assemblers run highly sub-optimal supply chains today, and significant cost savings can be squeezed out in a number of high value industries such as computers/computer peripherals, consumer electronics, and appliances. But a full supply chain perspective is needed, and the solution provided would need to incorporate excellent control of information flows and underlying basic transport services to exacting standards.

Clearly, the major local players who control transportation assets do not have the capability to optimise customers' supply chains. This is where creative and adventurous players can strike by forging alliances with foreign or local players, as the case may be, to build world-class businesses in China and beyond.

Finally, for more specialised players there may be niche opportunities to provide technological solutions, in the form of tracking-and-tracing hardware and software, tools that allow visibility into factory processes, specialized network optimisation software, and financial services related to distribution management, among others. The size and scope of China's market could allow these more specialized plays to develop into big businesses themselves before long.

The prospects are promising, no doubt. But players should remember that they can fade, if government policies and agreements turn out to be short-lived or don't materialise as expected.

Some obstacles to success

The challenges posed to building a business in today's China remain daunting, no matter how exciting the future may be. Success will hinge on judicious decisions that take into account regulatory uncertainties and unfavourable aspects of economic policy, current limitations in the logistics and transportation sector, and their own capabilities.

- **Regulatory and other uncertainties:** In China, as in most emerging markets, government policy may need to shift direction, sometimes suddenly, if economic reform entails too much social dislocation. Policy can also be rendered ineffective by a lack of compliance at the local level. Local authorities can be slow in abiding by central policies or agreements. At the company level, national Chinese companies can have trouble getting their local branches to fall in line. Furthermore, contracts between service providers and customers are not always upheld, which could imperil the much-needed trust in third-party logistics providers.

  Another problem in China is that the rule of law is uneven at best, and thus business investments often need to protected by building numerous relationships, perhaps at many levels of government. For a major foreign investor, another risk to consider is that business fortunes can change along with political ones. And on the economic front, China's currency remains unconvertible, and risks devaluation if the economy falters.

- **Sector limitations:** Breaking into the market for logistics and transportations solutions is very difficult in China. Solutions providers have to work hard to convert customers, who are very sceptical about these services and tough negotiators. Operating within the logistics sector is made more difficult by the scarcity of professional managers and talented operators. The market for technical and experienced managerial talent is very constricted and ever tightening. As in other emerging markets, standards of service and professionalism have remained low, especially beyond the top tier cities.

- **Company capabilities:** It goes without saying that every company must view its future position in China against its specific aspirations, strengths and capabilities. Another major consideration is its risk tolerance and timeframe for investments with positive returns. None of these will be easy judgements to make. Even with the opening of China's transport and logistics sector as articulated in the WTO accession terms, players cannot take it for granted that things will come to play as promised.

Ways to approach the market

In general, we believe that players with serious aspirations in China's logistics and transportation sector would have better chances of success if they approach the market in the following ways:

- **Think local/multi-local before thinking regional or national:** Right now, setting up nationwide distribution capabilities is much too difficult in China since economic activity is concentrated in specific pockets of the country and widely differing local barriers must be tackled on a one-off basis. Even companies that would normally operate on a national scale should consider developing comprehensive coverage of one part of the country before spreading out to the rest. The rewards of this kind of focus can be great: A successful business in one part of China can easily become as big and attractive as a business deeply penetrating other Asian countries in their entirety.

- **Focus on information and coordination in developing logistics 'solutions' rather than asset ownership -- that is, try to control, not own assets:** Many of the hard assets in the transport and logistics sector are controlled by domestic companies and may not be of high quality, by international standards. A major need is to deploy these assets more efficiently and in a networked fashion to achieve higher coordination, utilisation and other operating synergies. Solutions that add value to logistics customers need to be crafted, using these assets. The smarter players will develop and apply the know-how to create and sell solutions based on agreements that bind and control basic transport assets, rather than fully owning them. If they succeed, they will surely enjoy much higher returns and lower financial exposure.

- **Pursue alliances aggressively:** Alliances will be critical to manage potential competition and build the transport networks and relationships needed. Early movers could lock in some promising collaborations. Local companies with strong asset positions but low skills seeking global stature and investment would make a good match for sophisticated international players with global networks, ample investment funds and high China aspirations. Senior management in major Chinese companies is growing in sophistication, and negotiating agreements with them is more straightforward than in the early years of China's re-opening.

  More importantly, there could be a strong first-mover advantage in successfully developing strong transport networks. This makes it essential to actively manage competition as the network is built out over time. Similarly, the market for supply chain solutions will be relatively narrow at first, and concentrated in a handful of industry sectors. Again, managing competition between potential head-to-head competitors could make the difference between a profitable and an unprofitable situation for competitors.

- **Focus on organisation building as much as strategy or operations.** While transportation and logistics is necessarily a highly operational undertaking, in the long run, any logistics service business will be defined by the quality of its solutions, and, therefore, the skill and will of its people. Their drive, innovation and commitment will make the essential difference to service quality and the impact of solutions. This is doubly important in China – any winning business in the country cannot grow without a strong contingent of talented people who understand how to work within its constraints. Furthermore, as most winning logistics businesses will depend on alliances, setting up the right incentives, deal structures, and management processes is essential for proper coordination and delivery of the targeted services, of the desired quality.

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To be sure, the opportunities for developing modern transportation and logistics offerings in China are much greater now than before. This is a pivotal supporting industry that will enable China's sustained economic advance. But many players are eyeing China's enormous potential and the landscape is getting crowded. Those seeking to carve out a major position in China in this sector will need to act swiftly.