



cutting through complexity

On the move in China

The role of transport and
logistics in a changing
economy

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Logistics costs represent

18%
of China's GDP

RMB 125trn
of freight shipped in 2010

Transport and logistics
companies account for

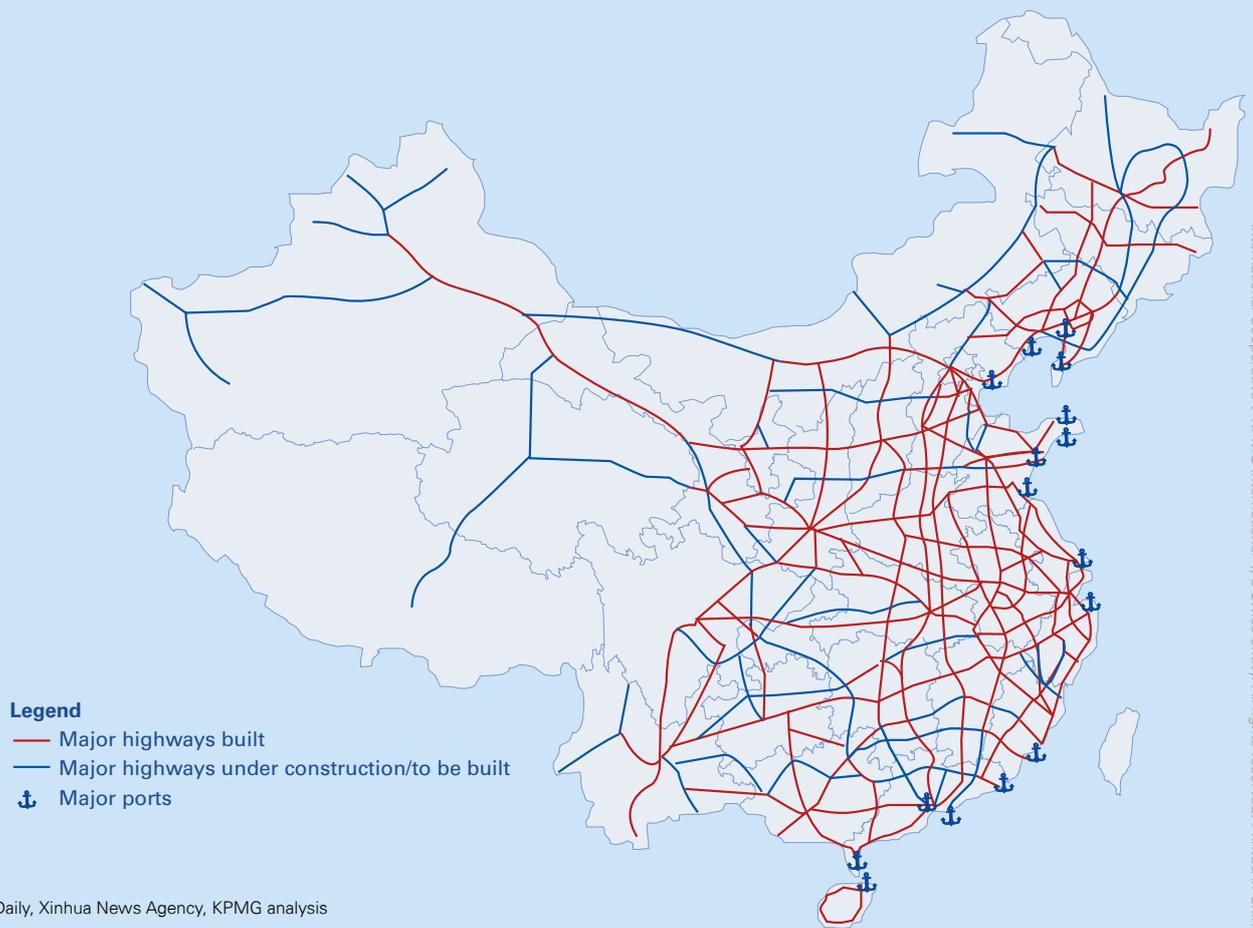
3.2%
of China's A share market
by capitalisation

Nine
of the 50 largest container
ports in the world are located in China

2.8%
of foreign direct investment
directed to transport
and logistics sectors

61%
of companies in China
outsource their logistics
operations

Sources: China Daily, KPMG analysis of A shares as of August 2011; China Statistical Yearbook; China Federation of Logistics & Purchasing; World Shipping Council 2011, Li & Fung Research Centre: "China's Logistics Industry Update 2011," May 2011.



Legend

- Major highways built
- Major highways under construction/to be built
- ⚓ Major ports

Source: Peoples' Daily, Xinhua News Agency, KPMG analysis

	Highway in operation (kilometres)	Additional highway (kilometres)
2009	65,100	4,391
2010	74,100	8,258

	Railway in operation (kilometres)	Additional railway (kilometres)
2009	85,500	5,598
2010	91,200	5,017

Source: National Bureau of Statistics





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About KPMG

KPMG China would like to thank all of the executives interviewed for this publication, especially Wang Guoqiang of NTS, Eddie Chan of FedEx Express, Paul Lee of Dimerco, and Leong Choong Cheng of Menlo Worldwide Logistics.



Executive summary

China's transport and logistics sector is hugely complex and competitive. Tens of thousands of companies are fighting for a share of this rapidly growing market, whose total value has more than doubled since the mid-2000s.

China's physical infrastructure has developed rapidly, but executives recognise that regulatory and operational procedures can often hinder efficiency. The government has acknowledged the need for change and in 2011, proposed eight areas where it will target improvements in the logistics sector.

China's move towards a more consumption-driven economy, combined with the improved accessibility of inland regions, has directed the industry's focus from being externally oriented towards meeting the needs of new internal markets.

In such a large and diverse market, many companies have succeeded by experimenting and finding a niche. If anything, the complexity of the market tends to put the largest operators, with streamlined processes and more adaptable and scaleable business models, at an even greater advantage.

There are some signs of consolidation and this may allow companies to grow more rapidly and profitably. However, buying up successful local businesses is no guarantee to overcoming the challenges posed by low-cost competition. To succeed, executives must consider how they can harness technology and develop systems that facilitate and de-risk payments, tax and regulatory processes.



China's changing logistics challenge

As domestic consumer markets take off and investment extends to new inland regions, China's transport and logistics infrastructure faces fresh challenges and fresh scrutiny from businesses and government planners.

The contraction in demand for Chinese exports in 2009, in the wake of the global financial crisis, highlighted the risks of reliance on export markets and the need to further stimulate domestic demand; something articulated in the government's latest Five-Year Plan.

Yet in the context of transport and logistics, the global economic downturn of 2008-09 only hastened a number of trends that were already underway. The most pressing challenge is no longer moving goods out of the country as quickly as possible. After all, China has invested and put in place infrastructure around many of the ports and conurbations along its eastern coast. Rather, the challenge is for logistics to keep pace with industrial relocation within China and also with the growth of domestic demand.

Anyone doing business in China will admit that managing logistics continues to be not only a complex, but also a relatively costly, part of their operations. Moving goods within China remains particularly challenging. For example, road tolls, almost all of them imposed by provincial or city governments striving to recover the funds they invested in their highway networks, can account for between 30-40 percent of transport costs for trucking companies.¹ High fees can encourage transport companies to overload their trucks and breach safety measures.

Performance can also be hampered by the availability of experienced staff, especially at a managerial level. With China's economy continuing to expand strongly, wages and land are becoming more expensive, particularly in the leading cities.

The government has also acknowledged that efficient transport and logistics are key for long-term development and it is committing huge funds to build airports, roll out a national expressway network and, expand and upgrade the country's railway system.

¹ Gao Changxin, "Tolls on road take a rising toll on drivers," *China Daily*, 15 June 2011



Geographically, the heavy investment in transport infrastructure has left almost every part of the country accessible by highway and most of it by rail. Airports dot every province, and transport capacity on the country's most important rivers has doubled in the last few years. The Yangtze, for example, has seen container volumes rise from 4 million 20-foot equivalent units (TEUs) in 2007 to 9 million in 2010. In total, it carried more than 1.5 billion tons of cargo last year, twice the weight of that shipped on all US waterways.²

The outcome of this investment is that the less-developed central and western regions are finally starting to become linked by reliable transport routes to the east coast.

Cities such as Chengdu and Xi'an have already made huge leaps in using airfreight links to develop high-technology industries producing high-value goods, which are then flown to their final destinations. More generally, companies — especially domestic ones — are now finding it possible to move beyond the regional or provincial limits that have held many of them back, penetrating third- and fourth-tier cities across the country.

Aside from the sheer scale of investment, the widely touted solution for many of the industry's ills is consolidation leading to the creation of a smaller number of larger and more efficient companies. Mergers and acquisitions are taking place, but they show no sign of accelerating. There are several reasons for this. China's many hundreds of lower tier cities remain best served by smaller local operators, which both know their immediate locality well and can offer low-price services. Financing for acquisitions is often hard to come by at a reasonable price, as are managers with the right skills and experience to handle the integration of acquisitions. Consequently, organic growth is preferred by many companies. Given the fragmentation in the sector, many domestic companies — and some multinationals — prefer to keep their transport and logistics services in-house. DHL's decision to divest from its domestic express joint venture seems to be an indication that the domestic delivery market will remain largely the preserve of local companies.

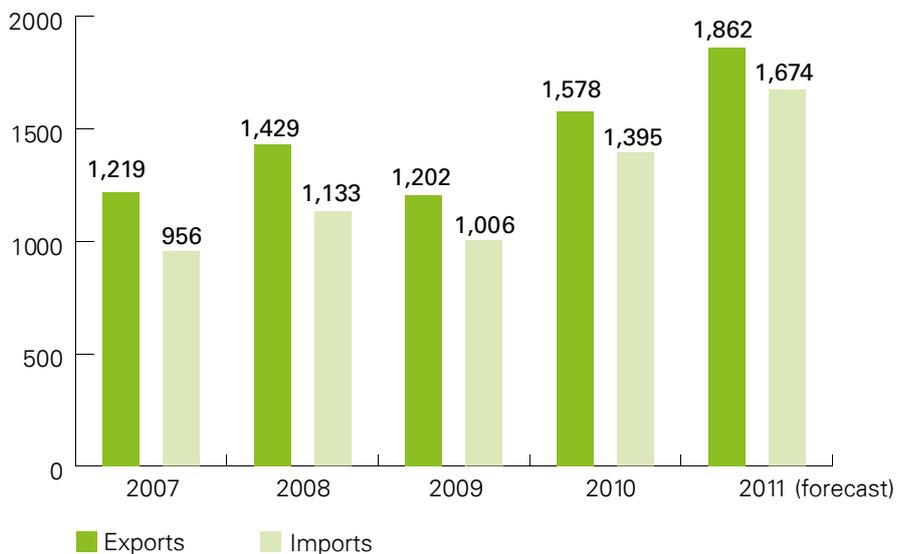
² Tom Miller, "Building a golden waterway," *China Economic Quarterly*, Vol 15, Issue 2, June 2011, page 6.

China's shift towards domestic private consumption is underway, but it will take time. The logistics and transport sector will play a key role in making it happen. Indeed, the possibilities that a modern logistics sector can offer have been demonstrated over the past two years with the sudden emergence of online shopping as a major new business. From almost nothing in 2008, e-commerce involving private citizens has grown to a point where China's biggest online business provider, the Hangzhou-based Alibaba Group, is planning to invest USD 4.5 billion to set up its own dedicated logistics firm.³

The government is now actively supporting such measures. In February 2009, in the aftermath of the global financial crisis, the government launched its *Plan to Adjust and Rejuvenate the Logistics Industry*.⁴ Its objective was to rationalise the industry by encouraging such practical measures as establishing technological and other standards, accelerating the rate of mergers and acquisitions, supporting training schemes, and increasing the utilisation of information technology through investment in research and development and the application of new technologies relevant to the industry.

The broad-brush strokes of the plan have since been supplemented by more concrete measures, most recently in a set of eight measures announced by the State Council in June 2011. In combination, the changing shape of China's domestic market, the emphasis of officials on improving the performance of its logistics sector, and the ambitions of the various different corporate players are set to transform the industry over the coming decade — albeit most likely in an incremental fashion rather than through any single bold leap forward.

Fig 1: China's trade, USD billion



Source: China Economic Quarterly⁵

³ "Alibaba develops logistics platform," China Daily, 30 May 2011.

⁴ See "物流业调整和振兴规划", available at <http://finance.people.com.cn/GB/71364/9190398.html>.

⁵ China Economic Quarterly, Vol 15, Issue 2, June 2011, page 2

Case study

NTS Logistics Management

With 2,000 staff and revenues of RMB 2.2 billion in 2010, NTS Logistics Management has built itself into one of China's top five air-forwarding businesses – sufficiently attractive for Maersk's global logistics subsidiary, Damco, to buy a majority stake in the company in August 2011.

Founded in 1992 in Beijing, NTS rapidly established itself as north China's biggest airfreight business. After a corporate restructuring in 2006, the core of its operations, including its headquarters, were moved to Shanghai. This paved the way, three years later, for it to acquire Tong Cheng Logistics, one of China's largest road transport companies, and so make it able to offer a full portfolio of domestic transport and international forwarding services.

The company's global freight forwarding unit operates out of seven international gateways — Shanghai, Beijing, Hong Kong, Tianjin, Qingdao, Ningbo, and Nanjing — linked to 40 countries around the world. Currently, its domestic network spans 235 service

centres, a total it aims to increase to 800 by 2012.

Having both acquired a company, and then been acquired itself, Wang Guoqiang, NTS's Chief Financial Officer, believes consolidation will be a major feature of the transport and logistics sector in the coming years.

"The M&A trend will gather pace," he says. "National companies will wish to acquire more regional ones, and the small ones will find it hard to survive."

A big driver towards more M&As, says Mr. Wang, are increasing costs, particularly for labour, fuel and facility rentals. "China's built itself up on low-cost manufacturing, which makes it hard for businesses to afford higher transport fees. We can't simply pass on our cost increases to the end customer."

Instead, companies have to find ways to control their costs internally, which for many, requires increasing the scale of their operations.

The rewards for those which succeed will be enormous, says Mr. Wang. "For growth in private consumption to take off, China will

need logistics companies that can build nationwide networks through which they can distribute goods to every city. For those businesses able to scale up and develop such nationwide networks, the opportunities will be fantastic."

Realising such networks, however, cannot be done by the companies alone. Equally important will be official support, especially in the consistent enforcement of national rules across the whole country, the reduction of the many fees and taxes logistic companies are subjected to, and through support for a thorough consolidation of the industry.

The government could also help by eliminating road tolls. "China's expressway roll-out has been vital for the industry," says Mr. Wang, "But all the costs are being borne by logistics companies."

Domestic complexity

Riding the country's economic expansion, China's transport and logistics industry has grown impressively in recent years. According to the Hong Kong Logistics Association, total logistics costs in 2009 were RMB 6.1 trillion, up from RMB 3 trillion five years earlier.⁶

The goods transported by China's logistics firms are being carried on a rapidly expanding transport network. Expressways have been the leading beneficiary, with total mileage rising from just 16,300 kilometres in 2000 to around 70,000 kilometres in 2010 — and the share of total freight carried by road transport has risen from 11 percent to 30 percent over the same period (see figures 2 and 3). Spending on railways has risen sharply, as has investment in inland waterways, especially since 2008 when the government launched a RMB 4 trillion stimulus programme to counter the effects of the global financial crisis. Airports have been, and will continue to be aggressively upgraded, though most improvements are aimed more at passengers than air freight.

These huge numbers, however, mask the fact that logistics costs in China are also high. While there are significant variations by region, overall logistics costs amount to 18 percent of China's gross domestic product, higher than many developed countries. The good news is this share is dropping, but slowly: in 2004, the figure was 18.8 percent.⁷ The main brunt of this high cost are users. For manufacturers, logistics costs can amount to as much as between 30-40 percent of production costs.⁸ For companies wanting to distribute goods, the challenge is having to deal with numerous small operators. Transportation companies also suffer from reduced efficiency and an inability to pass on their high operating costs to the user.

One reason for China's high logistics cost is the fragmented nature of the sector. Carrying goods around the country can involve a mixture of foreign, state-owned and domestic private businesses. The precise mix varies from sector to sector, depending on the respective degree of liberalisation. Road transport, for example, is hugely competitive, having been fully open to all types of company since the

6 Anthony Wong, "Latest Logistics Development in China," 19 September 2009; available at: <http://www.advantageaustria.org/cn/office/wong.pdf> (accessed 20 July 2011).

7 "The road ahead for logistics sector," *China Daily*, 31 December 2010.

8 Anthony Wong, "Latest Logistics Development in China," 19 September 2009; available at: <http://www.advantageaustria.org/cn/office/wong.pdf> (accessed 20 July 2011).



mid-2000s; air freight, by contrast, remains tightly restricted. Broadly speaking, however, the types of companies operating fall into one of three categories.

First are the state-owned giants, including Sinotrans Group, China Post and the various offshoots of state bodies such as EMS, China Air Express and China Rail Express. These tend to have strong positions in sectors restricted to other types of companies, such as air freight and domestic letter delivery.

Second are the hundreds of thousands of private companies operating in more liberalised sectors such as trucking, general logistics and express delivery. Some, such as express delivery firm Shentong Express and freight forwarder NTS, already operate nationwide. But the majority are small or medium-sized businesses, operating locally or regionally. Small companies can compete with large ones by specialising in local markets and by offering competitive prices and better service for local moves. For courier deliveries within cities, for example, such businesses often charge as little as one-quarter of the fees of their national rivals.⁹

Third are the international operators, including Hong Kong-based companies. With their decades of experience and access to finance and global networks, these companies largely focus on international business. Many are also experimenting with domestic business. However, their higher cost structures have left many of them challenging to compete, as the experience of DHL in the express sector demonstrates.

Estimates of the total number of transport and logistics companies operating in China vary from the tens of thousands to hundreds of thousands — depending on exactly what is defined as a logistics business.¹⁰ Many lack the means to invest adequately in equipment, facilities and training for their staff.

Transport and logistics companies are subject to a range of taxes and regulations. Currently transport businesses, for example, pay business tax at a 3 percent rate; warehousing and freight forwarding both have a business tax of 5 percent.

⁹ "Courier business is 'chaos' due to public vs private uncertainty", *China Daily*, 28 January 2010.

¹⁰ Shanghai Daily put the figure at more than 60,000 in mid-2011 – see Winny Wang, "Logistics sector receives some help", *Shanghai Daily*, 15 June 2011; The Economist Intelligence Unit put it at 700,000 in 2010 – see Economist Intelligence Unit, *China Hand*, Chapter 11, "Distribution," November 2010.

Companies that span different parts of the supply chain have to pay multiple taxes to different bodies at different rates. However, changes likely are on the way as the State Council has pledged to unify the different taxes applicable to the goods sector from the services sector by phasing out business tax and replacing it with a system where all companies pay VAT.

There are also tolls levied by provincial and city governments. For trucking companies, these can account for one-third of their total costs.¹¹ Local restrictions on which companies are allowed to pick up loads also make it hard for any out-of-town transport company to find loads for return journeys, leading to no-load trucks accounting for an extremely high 37 percent of journeys.¹²

All of this further compounds the challenges facing small operators by making it harder to establish standardised processes and effective management controls. In turn, it makes practices such as overloading more common. In an article in the *Shanghai Daily* in June 2011, a driver explained that he had to overload his truck simply to cover the cost of fuel and tolls and avoid suffering a loss.¹³

China's high rate of economic growth, while fuelling demand for logistics services, also creates challenges for operators. Wage costs are rising sharply. At the lower end, the government has pledged to increase minimum wages by at least 16 percent annually over the course of the 12th Five-Year Plan. At the higher level, several executives said that after handing out 20-30 percent increases in the last two years, managerial salaries in China are now as high as in other developed markets.

11 "Logistics sector receives some help", *Shanghai Daily*, 15 June 2011.

12 "Latest Logistics Development in China", 19 September 2009; available at: <http://www.advantageaustria.org/cn/office/wong.pdf> (accessed 20 July 2011).

13 Quoted in Winny Wang, "Logistics sector receives some help", *Shanghai Daily*, 15 June 2011.



Part of the reason why logistics costs are so high as a proportion of GDP is China's manufacturing orientation: measured by value, moving industrial products accounts for around 90 percent of all goods moved; in developed countries, with their far greater reliance on services, logistics costs are certain to account for a far lower share of GDP.¹⁴

Another part of the reason is that regulations governing the sector have remained fragmented. During its World Trade Organisation accession negotiations, China made no overarching commitment towards opening its transport and logistics industry. Instead, it reached separate arrangements for different sub-sectors such as road transport, warehousing and distribution.

Restrictions on most transport and logistics-related businesses were removed by 2005. Foreign companies and private Chinese ones can operate 100 percent wholly owned businesses in trucking and freight-forwarding, storage and warehousing, and domestic and international express deliveries. One area that remains off-limits to all companies is mail. In October 2009, the country's new postal law granted China Post exclusive delivery rights for handling packages weighing less than 50 grams within cities and packages weighing less than 150 grams between cities.

The outcome is an industry in which it is tough to survive — let alone thrive. Many new ventures therefore are experimental — set up to test the waters and see what is possible.

¹⁴ "The road ahead for logistics sector," *China Daily*, 31 December 2010.



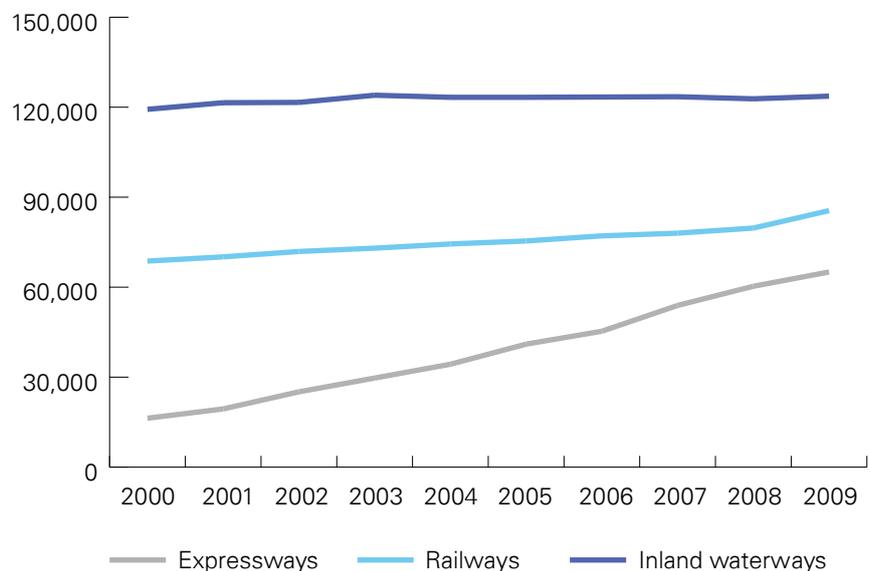
In June 2010, DHL, which had been operating in China since 1986, entered the domestic express delivery market with a specially formed joint venture. Just 13 months later, however, with a daunting financial outlook compounded with a challenging regulatory landscape like the new postal law above, the business was sold to Uni-top, a domestic courier company based in Shenzhen.

The transport and logistics sector is subject to oversight by a range of different bodies, with many jurisdictions overlapping. Attempts to overhaul the regulatory sector remain work in progress. A government restructure in 2008 brought most transport- and logistics-related ministries and bureaus — among them the former Ministry of Communications, Civil Aviation Administration of China, State Postal Bureau — under one roof, a newly formed Ministry of Transport.

The move was an acknowledgment that far greater cross-industry coordination was necessary. The Ministry of Railways has retained its existence as a separate ministry, and different institutions continue to maintain their own identity at ministry, provincial and city level, however, policy development and implementation remains a challenge.

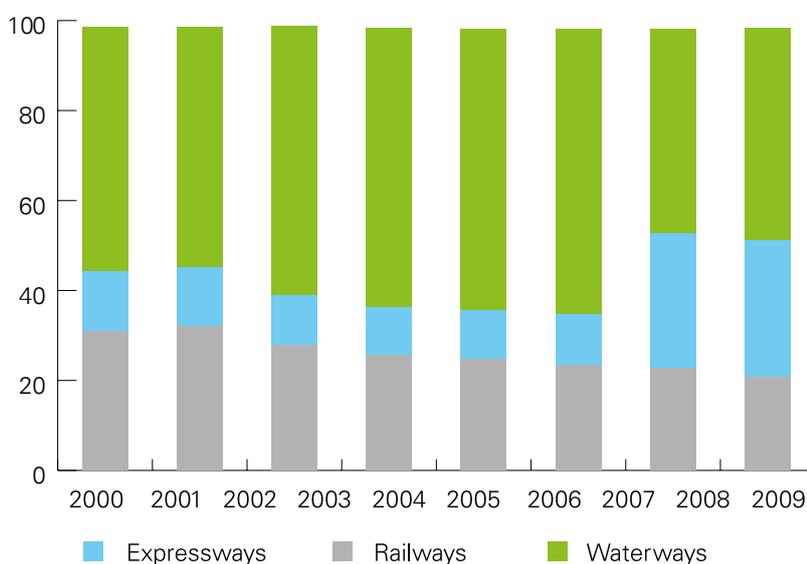
For companies looking to navigate China’s logistics industry — either as an industry player or to move their goods around within the country — understanding the industry’s development will go a long way to explaining both its complex and contradictory structure. Reform is on its way, but it will take time to implement.

Fig 2: China’s transport networks, total length, km



Source: China Statistical Yearbook, 2010

Fig. 3: China's share of freight tonne-km carried by principal transport modes, percent



Source: China Statistical Yearbook, 2010

Table 1: China's WTO timeframe for establishing wholly foreign-owned companies in logistics services

Storage and warehousing	January 2005
Freight transport by road	January 2005
Freight forwarding	January 2006
Courier services	January 2006
Logistics services	December 2005
Freight transport by rail	January 2008

Source: Economist Intelligence Unit, 2011

Case study

FedEx Express

FedEx China's history stretches back to 1984, when it launched its first outbound express service. Inbound deliveries followed three years later, and it has kept growing ever since, today serving more than 400 cities across the country with more than 8,000 staff.

Its services revolve around a trio of airports: since 2009, Guangzhou's Baiyun airport has been its Asia Pacific hub, linking to cities across east and south-east Asia and Australia; Hangzhou is its China domestic hub, serving more than 400 cities across the country; and Shanghai's Pudong is its main international gateway to North America and the rest of the world, with 68 flights weekly in and out of the country. In addition, it also operates international gateways in Beijing and Shenzhen.

Through 2009 and 2010, as the global economy recovered from the global financial crisis, international express deliveries from China expanded by 40 percent. This increase, however, was dwarfed by growth in domestic express services, which rose 57 percent. FedEx's operations mirror this rise: while shipping internationally remains the dominant part of its China's business, domestic operations are growing faster.

A major factor in this domestic growth is e-commerce, thanks to the huge surge in popularity of business-to-consumer (B2C) websites such as Taobao, the online shopping site operated by China's leading e-business company, Alibaba Group.

Another factor is the rapidly improving transport infrastructure, allowing ever more parts of China to link themselves into global supply chains and people, even in third- and fourth-tier cities to gain access to goods from anywhere in the country.

FedEx serves the China market with two services: a faster, time-definite service that uses both ground and air networks, and a slower, ground-only general delivery service. To date, the company reaches more than 100 cities.

"They like our service, but not our price," says Eddy Chan, FedEx Express's Head of China. Over time, however, he believes sticking by its commitment to provide high-end services will prove to FedEx's advantage, "Many companies try to save money by compromising on quality; we're here for the long term, so we don't cut corners," he says.

Instead, FedEx concentrates on building a business that will bring longer-term benefits. In January 2010, it introduced Boeing B777 aircraft to

allow for direct flights from Shanghai to Memphis. Along with being more fuel efficient than the McDonnell Douglas MD-11s they replaced, the Boeing 777s ended the need to touch down elsewhere en route to the US, thus pushing the cut-off time for pickups in Shanghai back two hours to 6pm. Boeing 777s are now also used for flights from Shenzhen to the US.

Technology is also used throughout the company's China operations to enhance productivity and service standards. All delivery staff are equipped with computer handsets featuring GPS equipment that allows package movements to be monitored so packages can be collected and tracked with maximum security and efficiency.

As a result, FedEx focuses on the high-end — delivering goods such as RMB 2,000 mobile phones, for which customers are willing to pay a premium for delivery in return for the guarantee that their goods will arrive both quickly and in good condition.



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Finding a niche

For retailers and other companies wishing to sell goods nationwide, finding logistics businesses with a true single nationwide reach can be a demanding task. Companies are succeeding by exploiting niche opportunities and investing in their own systems and processes.

Developing in-house logistics capabilities

Companies with big enough pockets have tended to overcome the challenges of China's fragmented logistics industry by developing their own logistics arms. KFC, for example, China's biggest restaurant chain, with some 3,300 outlets in 700 cities, runs its own logistics network.¹⁵ Procter & Gamble has also preferred keeping a high degree of control over the distribution of its goods in China. In late 2010, it began building a USD 100 million distribution centre in Guangzhou, its biggest in Asia and second biggest worldwide.¹⁶

In such circumstances, relationships will continue to matter. Procter & Gamble has operated in Guangzhou for nearly three decades and it received support from the local government to develop its logistics centre there. Procter & Gamble is paying for the facilities' equipment, while the city has contributed land and is responsible for construction.

Other large companies have found they too can ask for support from city governments. As more industries relocate inland in search of cheaper labour and land, a prerequisite is efficient transport links to east and southern coastal provinces, and on to the outside world. In October 2010, Foxconn opened a USD 2 billion plant in Chengdu assembling iPads, laptops and other electronic products. While the majority of Foxconn's China output currently comes from facilities in Shenzhen and elsewhere along the coast, in 2011 around one-quarter is forecast to come from Chengdu and other inland facilities, rising to half in 2012.¹⁷

15 Yum!, <http://www.yum.com/company/china.asp>, accessed 30 July 2011; http://www.cosmeticsbusiness.com/news/article_page/P_and_G_invests_in_Chinas_logistics_and_R_and_D/56715 Accessed 21 Jul 11].

16 "P&G invests in China's logistics and R&D," *Cosmetics Business*, 16 September 2010.

17 "How to Beat the High Cost of Happy Workers," *Bloomberg Businessweek*, 5 May 2011.



Investing in systems and people

For companies that lack the means to handle logistics in-house, moving goods around the country can be a slow process, typically requiring multiple transfers between a host of operators, making it hard to keep track of shipments and offering many opportunities for wastage either by theft, breakage or carelessness. Leading operators are differentiating themselves by addressing these issues and focusing the consistency and reliability of their service.

This is something which requires a significant investment in systems, processes and human resources. Management information systems to track trucks, loads and warehousing arrangements remain in their infancy. On-time departure of aircraft remains an issue, as air routes are limited. Further adding to costs are inconsistent provincial level standards for everything from pallets to insurance.

Having committed to what can be a sizeable investment, establishing and embedding processes that effectively link people with systems and infrastructure is critical. Size can itself be a cause of risk when it brings a heightened expectation of consistency in areas such as sales interfaces, complaints handling, or documentation. Many large organisations are developing shared services or turning to outsourcing to achieve this consistency in a cost-effective way.

If companies can fully realise the return on their investment in systems, they have an opportunity to establish a competitive advantage; domestic players may be well placed if they can develop processes which employees feel comfortable with in the local context.

China's talent base is deepening, but attracting trained and experienced staff to the logistics sector is a challenge. According to the Hong Kong Logistics Association, China's universities are graduating less than 15,000 students a year in logistics; it estimates the annual demand for logistics professionals at more than 30,000.¹⁸ In turn, such shortages contribute to high turnover rates — up to 15-20 percent annually, according to managers in the industry — resulting in high recruitment and training costs.

¹⁸ Anthony Wong, "Latest Logistics Development in China," 19 September 2009; available at: <http://www.advantageaustria.org/cn/office/wong.pdf> (accessed 20 July 2011).

Tapping opportunities in express delivery and e-commerce

Many executives we interviewed admitted they had been surprised by the speed at which China's consumers are turning to e-commerce and mail order shopping. For all the challenges in distribution, companies are successfully getting those goods to them. One of the most striking developments of recent years has been the emergence of consumer-to-consumer (C2C) e-commerce among China's internet user population, now numbering around 300 million people.

For years, e-commerce in China was stymied by the lack of reliable payment systems. In 2008, express delivery companies started collecting payment when they dropped off goods — creating a new industry overnight. This business is set to continue growing rapidly. In a report issued in April 2011, Morgan Stanley forecast that by 2013, China's e-commerce turnover would be around 75 percent greater than it was in 2010.¹⁹

One company dominates the sector — Hangzhou-based Alibaba Group — with 64 percent of all China's e-commerce, thanks to its ownership of Alibaba.com, China's leading business-to-business (B2B) website, and Taobao, its biggest consumer-to-consumer (C2C) site. Now it wants to add logistics to its business.²⁰ In early 2011, it announced plans to spend USD 4.5 billion to develop its own logistics business, including a network of warehouses across China. Two other e-commerce businesses, 360buy.com and Dangdang.com, are also establishing their own logistics arms. Menlo, which features as a case study in this report, has worked closely with businesses providing distribution for high-value consumer products.

Whether express couriers will be able to translate their ambitions into profitable subsidiaries is unclear. One of the main reasons DHL and FedEx launched their domestic express services was to tap into China's rising consumption. Running such businesses is clearly expensive. Deliveries to private individuals typically have to be made out of office hours — either in evenings or on the weekends. Then, unlike in offices, which have reception desks open through the day, there can be no certainty that someone will be at home to receive the delivery. If a payment has to be made, or if the recipient wants to check the goods, a delivery can easily take 15 minutes — many times longer than simply dropping a package off at an office reception desk.

As DHL's experience in the express delivery sector has shown, making money from such a business is not straightforward. Business-to-consumer (B2C) e-commerce requires higher standards of service and more ancillary services than the B2B services Alibaba has largely provided up to now. However, in a sector where low cost operators feel the pressure of high fuel costs and burdensome regulations, it could be the higher value services that are best-placed to thrive.

¹⁹ See Morgan Stanley, *China Internet/Media: e-Commerce: Harvesting in Digital China*, 15 April 2011.
²⁰ "Alibaba develops logistics platform," *China Daily*, 30 May 2011

Case study

Dimerco

Dimerco's 20-year foray into mainland China has progressed through several clear stages. Founded in 1971 in Taiwan, the company opened its first representative office in the mainland in 1991, followed shortly after by a joint venture, Dimerco ZhongJing, one of the first such tie-ups with an overseas entity.

In 2004, working through a Hong Kong subsidiary, it established a wholly owned operation, Dimerco International, a step facilitated by the passing of Hong Kong's Closer Economic Partnership Arrangement (CEPA) with the mainland one year earlier. Along with the acquisition of road transport licences, in 2006 it was granted a domestic air freight licence.

Today, the company has 79 offices across China, with staff of more than 1,100 and an annual turnover of RMB 1.6 billion. While the largest part of its revenues comes from air freight, its business is increasingly focused on offering integrated logistics solutions to companies wanting to access China's domestic consumer market. Success rests on combining its strengths in the air, truck and marine business.

"We are now looking at how to further integrate our services," says Paul Lee, the company's President for Greater China, based in Shanghai. "If necessary, we can add other services such as customs brokerage

to provide a more complete package."

Dimerco has historically benefited from its expertise transporting high value electronics and communications equipment. A growing area of business is developing networks that can move goods to inland destinations.

"Transport to these inland locations is slower and more costly, but the companies we serve are moving here because other costs are lower," Mr. Lee explains. "Production has been building up in central and western provinces over the last three years and it has now reached a critical level," he says. "However, the Pearl River Delta and Yangtze River Delta are still the real centres of activity."

Price differences between inbound and outbound containerised traffic have narrowed in recent years as demand for imports has strengthened. However, the shift of production for goods such as laptop computers to inland provinces has created this new dynamic.

Many components are transported to inland manufacturing centres by road, sometimes taking three days to be delivered from the coast. But with the finished products shipped out by air freight, a lot of spare haulage capacity remains for the return leg.

One of the biggest transformations in China's transport network since Dimerco's arrival has been the roll-out of China's expressway network. Mr. Lee recalls how challenging China's infrastructure was in his early years in the country, but stresses how knowing the routes inside-out remains an advantage, especially when it comes to handling special cargoes in unfamiliar or challenging environments.

One such job involved supplying imported telecoms equipment to a domestic network carrier. The shipment included bulky base station equipment and towers, which needed to be transported to a remote mountainous area that was normally off limits to commercial traffic. "A number of our competitors turned down the work because they didn't believe it could be done," Mr. Lee recalls. "I spent over a week at the site personally overseeing the project. Our flexible approach and local knowledge enabled us to manage the situation with officials and even enlist people to help us move the equipment to where it was needed."

Things may have changed a great deal over the last 10 or 20 years, but local knowledge and expertise handling cargoes in challenging environments can still be an important differentiator for experienced logistics players.

The road ahead

With upgrades to China's transport infrastructure in place, officials are now working on strengthening the operational environment. The government's 11th Five-Year Plan for the period 2006-10, set out a number of initiatives to establish transportation and logistics markets in support of the development of service industries as well as the growth of the economy as a whole. Now, with the 12th Five-Year Plan, covering the period 2011-15, the emphasis has switched towards broader encouragement of developing a more sustainable economy through higher technological standards and innovation.

Encouraging greater private consumption and moving the Chinese industry up the value chain will help in this respect. As the country embraces more service and high-tech industries, companies will need stronger logistics support to improve their efficiency. In turn, this will call for better management practices, a far more widespread use of information technology and systems that can integrate and monitor the movement of goods and materials both across the nation and in and out of the country.

Eight measures announced by the State Council in June 2011 further underline how the government is looking to help the development of the sector through reforming the environment in which it works rather than giving it explicit support.

One area that could see dramatic change is the tax regime. Currently, those parts of the logistics sector in the transport and communications category pay 3 percent of their turnover as business tax, while others, such as warehousing, because they are defined as services, pay 5 percent. With their margins already low, companies are lobbying hard for the rate for the entire industry to be unified at 3 percent.

Companies with overseas operations are also lobbying hard for changes in rules introduced in 2009 that apply the business tax to all services where either the service provider or the service recipient is located in China — regardless of where the service itself is rendered.



Areas for improvement

The Chinese government announced eight measures to improve the logistics industry in June 2011:

- 1 Ease the tax burden on logistics firms by expanding a pilot programme that exempts logistics companies from multiple collection of taxes and unifying business tax rates on different parts of the supply chain.
- 2 Improve land-use policies by guaranteeing land for logistics parks and encouraging the expansion of convenient warehouse sites.
- 3 Reduce highway tolls and extend electronic systems that allow trucks to transit toll stations without stopping.
- 4 Simplify approval procedures for logistics practices and systems.
- 5 Encourage large logistics firms to integrate their resources and small ones to merge.
- 6 Boost technological innovation in the logistics industry.
- 7 Encourage local governments to increase investment in logistics infrastructure and develop financing channels for logistics companies.
- 8 Encourage bigger logistics firms to focus on the transport of agricultural products so farmers can get their produce to market cheaply and efficiently.

Source: Shanghai Daily²¹

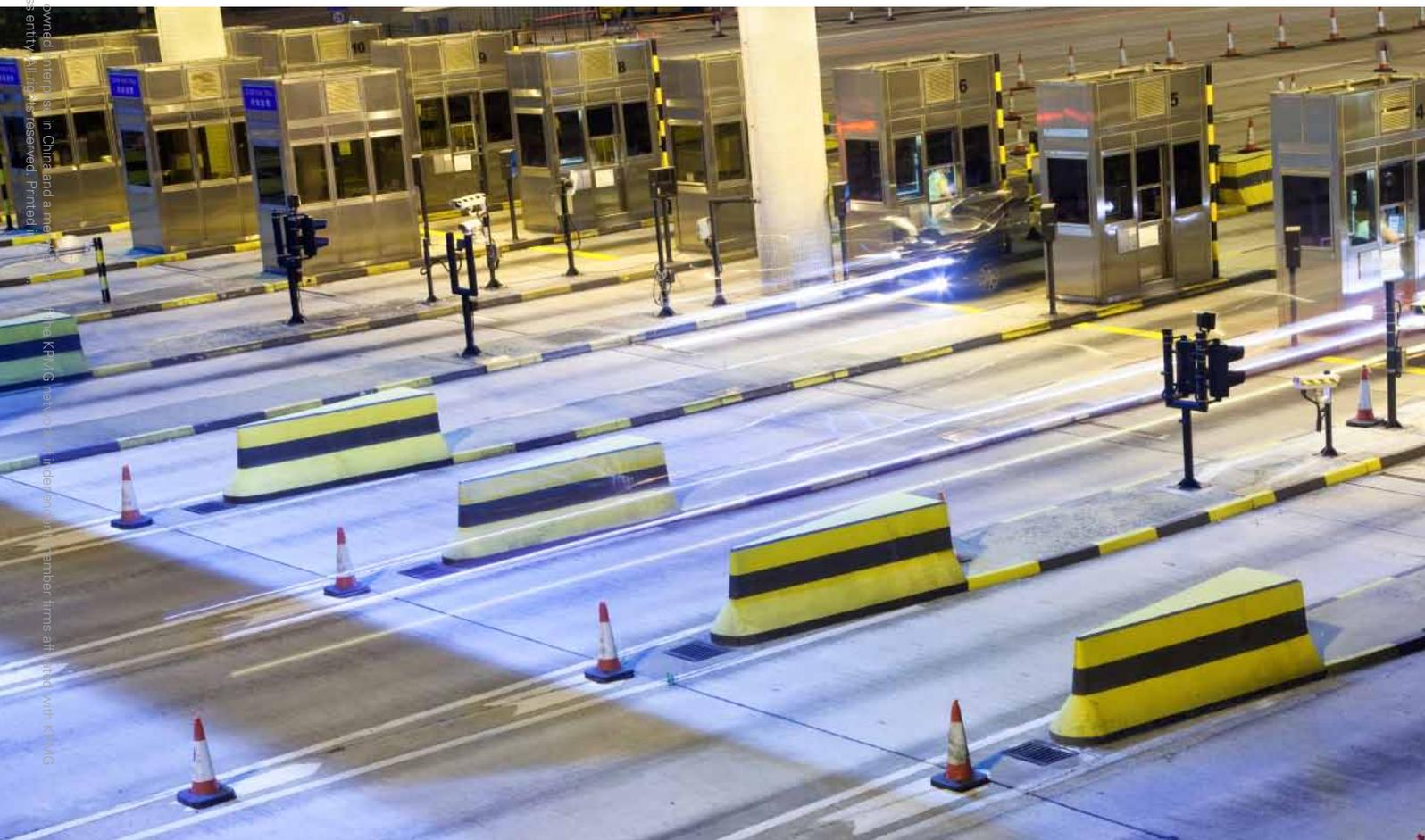
While these rules in theory affect many types of businesses, China-based transport companies that move goods internationally are particularly vulnerable, with all the work they do outside the country potentially being subject to Chinese business tax.

Officials are taking these issues seriously. The State Council has pledged to unify the different taxes applicable to the goods sector from the services sector by phasing out business tax and replacing it with a system where all companies pay VAT. This objective moved a step closer to fruition in late 2011, when the State Administration of Taxation and the Ministry of Finance finalised details for a pilot programme in Shanghai. Transportation, logistics and modern services industries were the sectors marked for inclusion in this programme. Replacing the varying rates now used would both be simpler, and therefore easier to oversee, and fairer.

Concerns about regulation largely centre on the weak or inconsistent enforcement of existing rules, rather than a need for any major overhaul. While tightening enforcement of rules such as those governing overloading would hurt small players, it would also encourage the emergence of bigger, more efficient businesses — which in turn, by being able to raise standards would cut on wastage and damage, eventually leading to a lowering of overall logistics costs. Also important would be a greater emphasis on uniform practices and standards for basic items such as pallets.

China Post, for example, publishes a monthly list of complaints made against express delivery companies; those with the most complaints have to submit a plan showing how they will improve their services. Exams are also becoming compulsory for staff in the courier industry.

Worrying about the rules, however, is to miss what is likely to prove the true driver of change in the logistics sector in coming years — the ways in which the best domestic transport companies use their low-cost base as a foundation for



out-maneuvering both other local and foreign companies. Much of the switch to private consumption is coming from domestic manufacturers that have found overseas markets harder to sell into since the global financial crisis; these companies remain very much price-oriented — they have to be to sell goods to Chinese consumers who, while getting richer, are still far from affluent. They will be looking for logistics companies which can provide basic services reliably and which can use their local knowledge to keep their costs down and navigate local regulatory and tax hurdles. As the best of these companies, they will offer formidable competition to the international companies, whose greater experience is offset by their higher costs.

It seems likely that government-backed companies could particularly benefit from this, as they will be able to build the scale and afford the investment that the vast majority of China's tiny transport companies simply cannot. But that is likely to prove the case only in those parts of the transport industry which remain closed or tightly restricted to other entrants. Elsewhere, powerful private companies such as NTS (see case study) and SF Express could show the way forward.

Paradoxically, a modest slowdown in China's economic growth could prove the catalyst necessary for change. For now, most companies have enough on their hands coping with the growth that has seen total turnover in the logistics sector double in five years.²² If this rate of increase were to decelerate — as at some point it will — both companies and the government will have to start looking at ways of making transport and logistics more productive. What is already happening to manufacturing companies squeezed by the rapidly rising land and labour costs of south and east China will, in turn, be played out in the logistics space.

For international companies, the issues are slightly different. Most agree that China's business environment would benefit from greater transparency and predictability. "We're not yet as confident about the security of land titles as in some of our other markets," explained the Managing Director of a large logistics business with warehousing facilities, in an interview with KPMG China.

Graft is another issue. "Being vigilant for under-the-table deals is a part of the job," says one foreign manager. However, he was not alone in pointing out that for his company, facilitation payments were not necessary to do business, and that conditions are far better than in many other Asian countries, where such practices are far more routine.

Customs procedures could be improved. According to the World Bank's logistics index, clearing customs takes an average of 3.4 days when there is a physical inspection involved, compared to 1.6 days in Germany and 2.2 days in the US. China inspects 9 percent of shipments that go through customs compared to 3 percent in the US and Germany and 2 percent in the UK.²³ "We have seen an improvement in the last five years," says one European freight-forwarding company. The number of agencies is an issue: China has four conducting export inspections; the US and Germany have two.

But all the companies interviewed for this report agree that further opportunities for them to grow their business can only emerge in China. "The market is big enough," says FedEx's Eddy Chan. "It would be better if everyone worked together to ensure that the industry is well developed — that we avoid unhealthy competition of a kind that results in customers not trusting express delivery."

This ideal will take time to materialise, but for companies that already have decades of experience in the country, patience is an already acquired quality.



²² World Bank Logistics Performance Index 2010; available at <http://web.worldbank.org/>

²³ Anthony Wong, "Latest Logistics Development in China," 19 September 2009; available at: <http://www.advantageaustria.org/cn/office/wong.pdf>

Case study

Menlo Worldwide Logistics

Menlo Worldwide Logistics (China), a subsidiary of Con-way Inc., a US transportation and logistics services company headquartered in San Mateo, California, entered China in 1999 with a presence in Shanghai's Waigaoqiao Free-Trade Zone. In 2005, it extended its operations to include non-bonded services, and today it offers logistics service via a network that extends across 110 cities across China.

The biggest change in its China history to date came in 2007, when it acquired Shanghai-based Chic Holding, one of China's top-ten third party logistics businesses, for USD 60 million. Headquartered in Shanghai, Chic brought with it a fast growing domestic network of third-party logistics and transport management services covering nearly 80 cities.

With its new acquisition under its belt, Menlo was able to broaden the range of its goods it distributed. Until then, its main focus had been high-technology and automotive components; through Chic's network, it was able to add chemicals and fast-moving consumer goods, in particular, working with US direct sales cosmetics company.

This direct sales company sells through a network of 500,000 "consultants" across China. Their products are brought to them by truck, first to 15 distribution centres spread across the country, from then on to around 60 stock points, where orders are made up for supply to the individual sellers.

Although Menlo owns its own truck fleet of around 60 vehicles, this only accounts for around 5 percent of its trucking capacity. The vast majority of the goods it moves are transported by local companies with which it has long-term agreements.

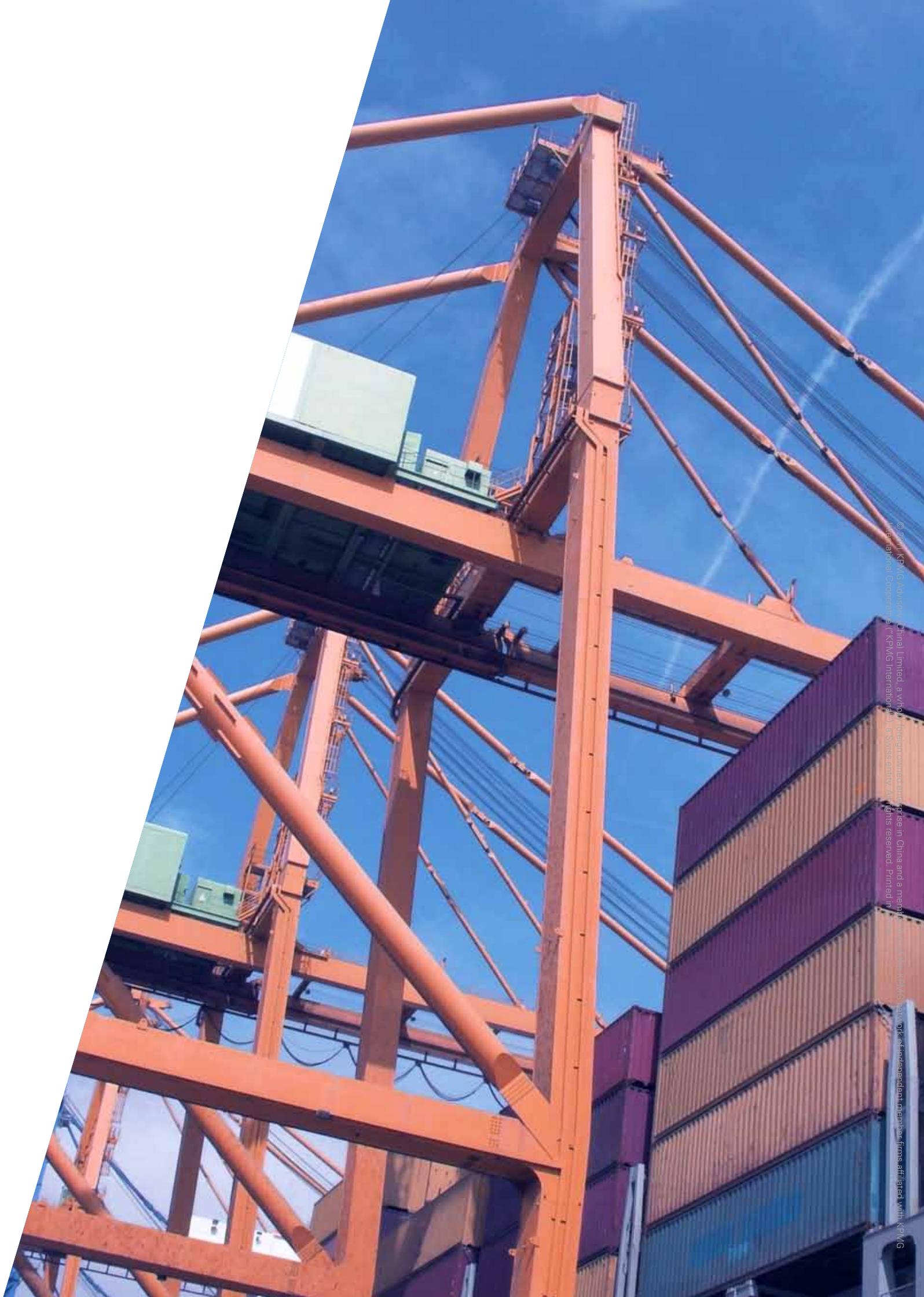
With the government actively promoting domestic consumption, business is booming, says Menlo's Leong Choong Cheng, its Senior Director of Business Development for North Asia. "Because of their ability to penetrate all parts of China, the online and direct sales models will be very important," he says.

One of the main constraints for logistics companies is finding good warehousing facilities in major cities, says Leong. While overall logistics business is growing by around 20 percent annually, warehousing space is only increasing at around one-third this rate, creating a major squeeze.

Fourth-party logistics services are also starting to take off, both for the handling of back-room processes such as order management, and even more so for total approaches - models where logistics companies take a share of all money saved by efficiencies they increase are appealing to both sides. "The combination of attacking existing inefficiencies while working in a fast-growing market is very appealing to many companies. It allows both sides to benefit enormously as processes which drive down wastage are introduced," says Leong.

Another area of growth for fourth-party logistics companies will be in managing the rapid delivery of goods direct to consumers: "We're going to see more and more knowledge-based logistics in China, not just moving stuff but building intelligence into managing the process," says Leong.

"The online model is here to stay and will grow fast. People will see something online and want it tomorrow. The trend is towards cutting out the middleman, with companies selling straight to end-user," he says.



Conclusion: The lure of consumption

To focus on the shortcomings of China's logistics sector is to miss what is happening and what is already possible. We believe the prospects for the logistics industry are extremely bright for a number of reasons.

First, the physical infrastructure is in place allowing huge and rapidly growing volumes of goods to be distributed between almost any two points in the country. Building a nationwide network may entail working with a host of local companies, but it can be done.

Second, there is a recognition centrally of the need to change – most obviously by eliminating overlapping taxation. If a simpler regulatory system can emerge from the creation of the Ministry of Transport, then a host of competing and conflicting standards may also be resolved. The transformation will not occur overnight, but the latest government proposals suggest there is recognition that change is necessary, while technology can be an enabler in comparatively simple ways, from streamlined transit procedures at toll stations to quicker approvals and payment systems.

Third, and perhaps most importantly, customers are demanding change. As other costs rise, manufacturers are looking to new points on their supply chain to drive efficiency. Logistics has become critical to many businesses' competitiveness.

Many international transport and logistics companies are focused on finding and serving customers willing to pay a premium price for quality and reliability of their services. As Menlo has shown, working closely with customers in the consumer goods sector to meet their specific needs can allow third-party logistics companies to establish niches in which they can thrive. DHL's experience with domestic express delivery, however, suggests that the general market for top-end service has yet to fully take shape.

For domestic companies, the challenges are varied. Smaller and medium-sized private companies are looking for ways to raise standards without being squeezed out by less scrupulous competition. Others will need to secure finance in order to acquire complementary or competitor businesses. The companies which are best



placed to succeed are those with a clear vision of their long-term goals and access to the financial resources necessary to be able to invest in people and systems.

Low levels of compliance have led to high wastage rates, and a lack of incentives to invest in better equipment, facilities and training. As FedEx's China head, Eddy Chan, puts it: "China needs a level playing field, and it needs good practices."

Tension may continue to exist between local government imperatives and central government directives aimed at bringing more order to the industry. In the long run, however, market restrictions will hold back development of the market.

All of the eight steps proposed by the government can in turn encourage the longer term goal of industry consolidation. Bigger, more efficient logistics companies would not only help manufacturers move their goods around more efficiently, it would also help farmers get both their inputs and their produce to markets as cheaply as possible, potentially helping to keeping a lid on food inflation. As such, increasing the efficiency of China's logistics sector would not only benefit business, but society as a whole. The biggest incentive to overcome the challenges facing China's transport and logistics industry is the lure of the domestic market.

Despite its high costs and difficulties, things which would have been impossible just a few years ago are now doable. Businesses can set up inland and expect to secure their inputs and move their goods to the coast at a manageable cost. Relationships with officials remain important for companies that want to get things done — but the operational environment is clearer. Local governments may remain an obstacle to moving goods from one part of China to another, but they can also give the support necessary to ensure basic business needs are met. In short, while China's logistics sector may be some way from being able to move goods quickly and efficiently between any two parts of the country, many of the elements to do are being put into place. Local governments have an important role to play in achieving greater national integration. They are also a major force in putting in place the facilities companies will need to link operations and markets both within China and to the rest of the world.

Contact us

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Our Transport & Logistics team in China is organised across our four key regions and with representation from our main service areas. For more information, contact one of the partners below.



Andrew Weir
Partner in Charge
Tel: +852 2826 7243
andrew.weir@kpmg.com



Simon Tong
Northern China
Tel: +86 (10) 8508 7040
simon.tong@kpmg.com



Jeffrey Wong
Eastern & Western China
Tel: +86 (21) 2212 2721
jeffrey.wong@kpmg.com



Li Fern Woo
Eastern & Western China
Tel: +86 (21) 2212 2603
lifern.woo@kpmg.com



Jennifer Weng
Eastern & Western China
Tel: +86 (21) 2212 3431
jennifer.weng@kpmg.com



Eileen Sun
Southern China
Tel: +86 (755) 2547 1188
eileen.gh.sun@kpmg.com



Jonathan Downer
Hong Kong
Tel: +852 2913 2583
jonathan.m.downer@kpmg.com



Hon Yuen
Hong Kong
Tel: +852 2847 5030
hon.yuen@kpmg.com



Beijing

8th Floor, Tower E2, Oriental Plaza
1 East Chang An Avenue
Beijing 100738, China
Tel : +86 (10) 8508 5000
Fax : +86 (10) 8518 5111

Shanghai

50th Floor, Plaza 66
1266 Nanjing West Road
Shanghai 200040, China
Tel : +86 (21) 2212 2888
Fax : +86 (21) 6288 1889

Shenyang

27th Floor, Tower E, Fortune Plaza
59 Beizhan Road
Shenyang 110013, China
Tel : +86 (24) 3128 3888
Fax : +86 (24) 3128 3899

Nanjing

46th Floor, Zhujiang No.1 Plaza
1 Zhujiang Road
Nanjing 210008, China
Tel : +86 (25) 8691 2888
Fax : +86 (25) 8691 2828

Hangzhou

8th Floor, West Tower, Julong Building
9 Hangda Road
Hangzhou 310007, China
Tel : +86 (571) 2803 8000
Fax : +86 (571) 2803 8111

Fuzhou

25th Floor, Fujian BOC Building
136 Wu Si Road
Fuzhou 350003, China
Tel : +86 (591) 8833 1000
Fax : +86 (591) 8833 1188

Xiamen

12th Floor, International Plaza
8 Lujiang Road
Xiamen 361001, China
Tel : +86 (592) 2150 888
Fax : +86 (592) 2150 999

Qingdao

4th Floor, Inter Royal Building
15 Donghai West Road
Qingdao 266071, China
Tel : +86 (532) 8907 1688
Fax : +86 (532) 8907 1689

Guangzhou

38th Floor, Teem Tower
208 Tianhe Road
Guangzhou 510620, China
Tel : +86 (20) 3813 8000
Fax : +86 (20) 3813 7000

Shenzhen

9th Floor, China Resources Building
5001 Shennan East Road
Shenzhen 518001, China
Tel : +86 (755) 2547 1000
Fax : +86 (755) 8266 8930

Chengdu

18th Floor, Tower 1, Plaza Central
8 Shuncheng Avenue
Chengdu 610016, China
Tel : +86 (28) 8673 3888
Fax : +86 (28) 8673 3838

Hong Kong

8th Floor, Prince's Building
10 Chater Road
Central, Hong Kong
Tel : +852 2522 6022
Fax : +852 2845 2588

Macau

24th Floor, B&C, Bank of China Building
Avenida Doutor Mario Soares
Macau
Tel : +853 2878 1092
Fax : +853 2878 1096

kpmg.com/cn

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