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China's Logistics Industry Update (2005-06)

IN THIS ISSUE :

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Broadly speaking, logistics refers to the physical flow of raw materials, semi-finished products and finished products along the supply chain, as well as all the flow of information and funds that support the physical flow. It interlinks all the sectors along the supply chain, such as raw material supply, manufacturing, distribution and retailing.

I. Introduction

China's economy has enjoyed high and stable growth in the last two decades. As a significant component of GDP, logistics affects every aspect of the economy. It is quite a large topic covering many areas. Our Newsletter Issue 12 *"An overview of the logistics development in China"* (http://www.idsgroup.com/profile/pdf/distributing/issue12.pdf) and Issue 27 *"Recent development of the logistics industry in China (2004-2005)"* (http://www.idsgroup.com/profile/pdf/distributing/issue27.pdf) have provided some background of China's logistics industry as well as the statistics and trends of the industry. This issue will provide an update on the status quo of China's logistics industry including the most recent logistics statistics and the problems encountered by the industry. It will then give a brief description of the impact of China's 11th Five-year Program on the industry. Last but not least, it will go into the future development prospects of China's logistics industry.

II. Status quo of China's logistics industry

1 Logistics statistics at a glance

(1) Rapid growth of logistics demand

China's economy has continued to grow very rapidly, with GDP expanding by 9.9% in 2005, hitting 18,232.1 billion. The growth is expected to persist as China continues to become more closely linked with the global world. With the fast development of the national economy, the demand for logistics services has been growing significantly. This is reflected commonly by the following two indicators:

a Total logistics revenue

According to the China Federation of Logistics and Purchasing (CFLP), the total revenue obtained by the industry amounted to 1,879 billion yuan in 2005, increased by 12.7% from 2004. Of this total, revenue obtained by the transportation sector in general made up the largest portion and reached 1,592.4 billion yuan, grew by 10.5% year-on-year (yoy).

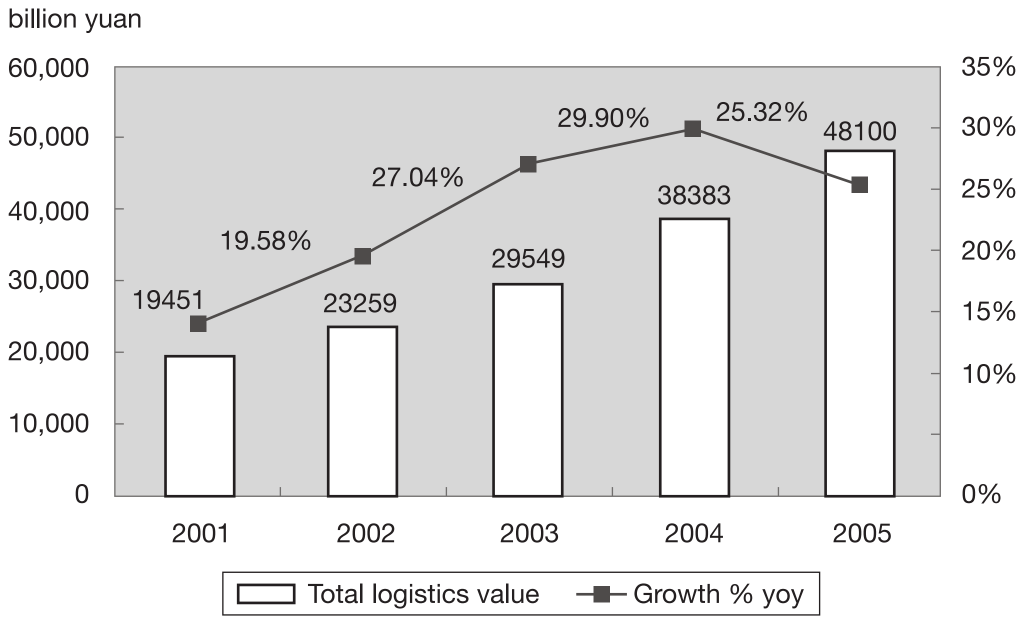
Looking specifically into the logistics segment will find that the revenue growth of some newly emerged logistics services was much higher than that of the industry's total revenue growth. For instance, the revenue earned by information and related services was 2.6 billion yuan in 2005, while revenue obtained from providing distribution services was 21.9 billion yuan. They both rose 28% compared to 2004. On the other hand, processing revenue reached 124.9 billion yuan, up 27.2% from 2004; packaging earned 23.9 billion yuan, up 29.9%. These figures indicate that the add-on services provided by logistics operators are expanding in a more rapid pace than the industry as a whole.

b Total logistics value

Another indicator of logistics demand is total logistics value. Total logistics value represents the total value of final products (including industrial products, agricultural products, imported products, renewable energy and consumer products) delivered to the end users after using the logistics services. The total logistics value for 2005 was 48.1 trillion yuan, grew by 25.2% compared with 2004. The growth in 2005 slowed down from 29.9% in 2004. This was attributable to the country's macro-economic tightening measures to curb overheating of the economy (see Exhibit 1 for the total logistics value and yoy growth from 2001- 2005).

Among the total logistics value, the value of industrial products accounted for about 86% of the total value, reaching 41.3 trillion yuan, up by 27.2% yoy; while logistics value of imported products amounted to 5.4 trillion yuan, up by 16.4% yoy (see Exhibit 2).

Exhibit 1: Total logistics value and growth, 2001 -2005



Source: CFLP

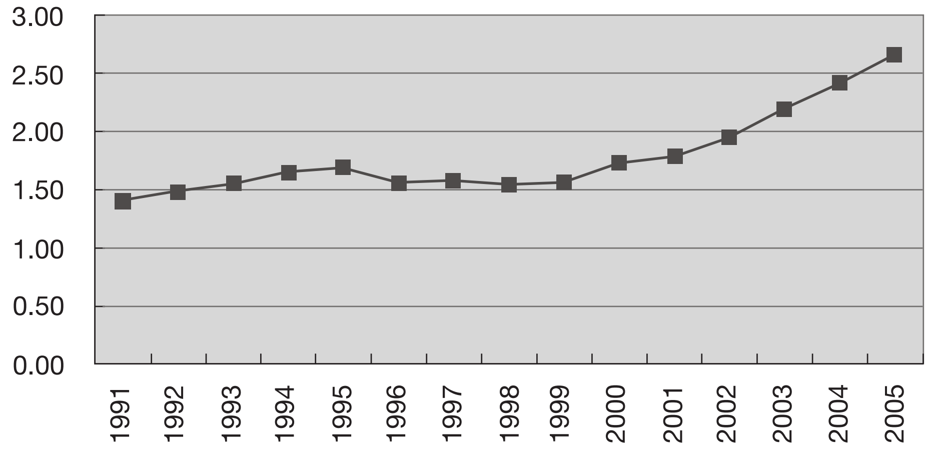
Exhibit 2: Breakdown of total logistics value, 2005

	Total logistics value (billion yuan)	YOY growth (%)	Proportion (%)
Category	48,058	25.2	100
- Industrial products	41,316	27.2	86.0
- Agricultural products	1,275	6.5	2.7
- Imported products	5,409	16.4	11.3
- Renewable energy	38	15.7	0.0
- Consumer products	20	7.7	0.0

Source: CFLP

Without doubt, logistics demand increases with economic growth. This can be reflected by the coefficient of logistics demand. The coefficient is obtained by dividing the total logistics value by GDP. In 2005, the coefficient was 2.64, meaning that the production of one unit of GDP requires 2.64 unit of logistics service to support. Exhibit 3 shows that the coefficient of logistics demand increased gradually during 1991-2005. The rising coefficient implies that the rapid growth of China's economy has been generating new demand for logistics services. Indeed, the CFLP even predicted that if China's GDP grows at 8.5% and total logistics value expands at 16.7%, the latter will reach 91 trillion yuan in 2010, doubling that of the present level.

Exhibit 3: Coefficient of logistics demand, 1991-2005

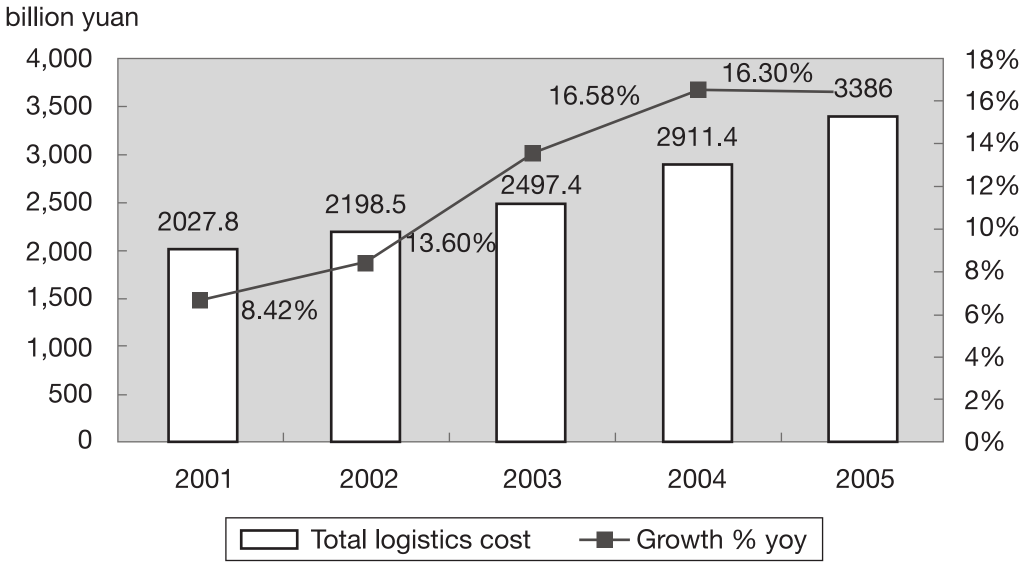


Source: CFLP

(2) Total logistics cost remains high, but growth rate declining gradually

The total logistics cost in 2005 was 3,386 billion yuan, representing a rise of 12.9% compared with 2004. However, its growth was 3.7% lower than that in 2004. Exhibit 4 depicts the amount of the total logistics cost and its annual growth in 2001-2005.

Exhibit 4: Total logistics cost and growth, 2001-2005



Source: CFLP

The ratio of total logistics cost to GDP represents the efficiency of logistics operation in the economy. It is also used as an indicator of the development level of the logistics industry. In general, the higher the percentage, the less efficient is the logistics industry. Exhibit 5 shows the total logistics cost as a percentage of GDP in the 10th Five-year Plan period (2000-2005). Despite remaining high in value, total logistics cost as a percentage of GDP has been on a downward trend. It decreased from 19.4% in 2000 to 18.57% in 2005 and the total cost savings in the 10th Five-year Plan period totaled 109 billion yuan.

As predicted by the CFLP, the ratio of total logistics cost to GDP will continue to drop resulting from higher efficiency of modern logistics services. CFLP predicted that total logistics costs during the 11th Five-year Program period (2006-2010) will grow at 10% annually, 2% lower than that of the 10th Five-year Plan period. It also forecasted that the total logistics cost will reach 5,400 billion yuan in 2010, the ratio of total logistics cost to GDP at around 16.8% and cost savings yield during the period will be around 435 billion yuan.

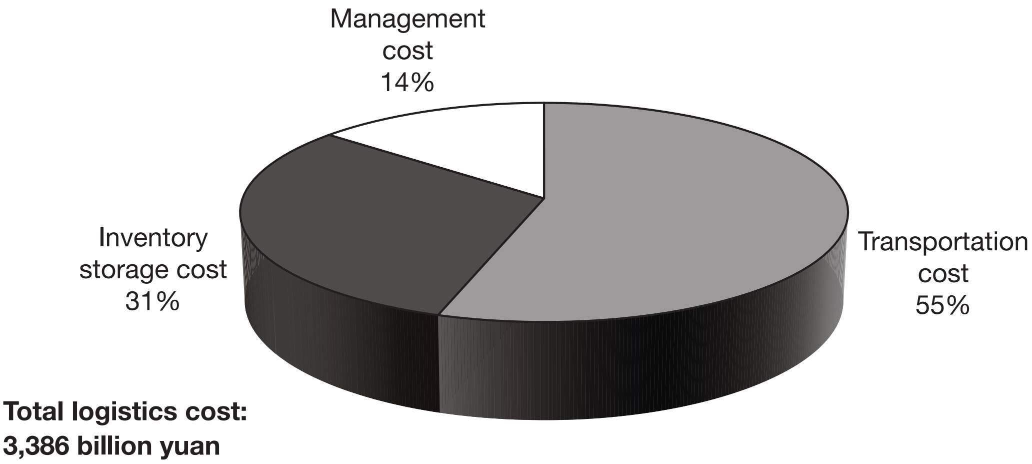
Exhibit 5: Total logistics cost as a percentage of GDP, 2000-2005

Year	Total logistics cost / GDP* *(%)*	Percentage decreased as compared to previous year *(%)*	Total logistics cost savings *(billion yuan)*
2000	19.40		
2001	18.80	0.58	63.4
2002	18.90	-0.10	-11.5
2003	18.92	-0.02	-2.7
2004	18.77	0.15	24.4
2005	18.57	0.19	35.4

Source: CFLP
Note: These are revised figures and differed from those shown in China Logistics Yearbook 2005.

Total logistics cost includes three cost components, namely transportation, inventory storage and management costs. Transportation cost consists of the cost incurred in the transportation of goods by means of railway, road, airplane, pipeline, and transporting agents. Inventory storage cost includes not only the cost incurred in occupying the warehouses, but also interest cost of money received if inventories were sold, expired and depreciated; as well as the insurance cost of inventories. Management cost includes the spending on managing logistics information, in particular, third-party and fourth-party logistics. The composition of the total logistics cost in 2005 is shown in Exhibit 6.

Exhibit 6: Composition of total logistics cost, 2005



Source: CFLP

The followings are the trends of the total logistics cost by category:

a Transportation cost

Transportation cost accounted for the largest portion of the total logistics cost, totaling 1,863.9 billion yuan in 2005, grew by 10.1% yoy. The growth rate is smaller than that of the total logistics cost, and declined by 1.9% over the previous year. As a result, its proportion over the total logistics cost lowered from 56.9% to 55%. This is largely attributable to the slowdown of demand for goods transported resulting from the macro-economic tightening measures. .

Exhibit 7 shows the composition of transportation costs and their respective growth rates in 2005. Among the various segments, spending on air transport and water transport recorded the highest growth. They increased by 16.9% and 16% respectively.

Exhibit 7: Composition of transportation cost and respective growth rates, 2005

Category	Transportation cost *(billion yuan)*	% of total *(%)*	yoy growth *(%)*
Road	1,176.6	63.1	9.5
Railway	203.0	10.9	8.4
Water	246.0	13.2	16.0
Air	16.6	0.9	16.9
Pipeline	11.7	0.6	15.8
Freight forwarding and other means	210	11.3	7.6
Total	**1,863.9**	**100**	

Source: CFLP

b Inventory storage cost

Spending on inventory storage totaled 1063.2 billion yuan. It grew by 18.4% compared to 2004, which was higher than the increase in total logistics costs of 12.9%. Inventory storage cost accounted for 31.4% in 2005, lifted up 1.5% compared with 2004.

Among the various components of inventory storage cost, distribution, processing and packaging cost was the category with the highest growth, rising 26.2% from 2004. It was followed by the warehouse and storage cost, which recorded an increase of 22.6%.

c Management cost

Management cost includes the cost of managing logistics operation, in-house research and development of technology for handling logistics information, etc. The amount spent on such cost was 458.9 billion yuan in 2005, rose by 12.3% yoy, and accounted for 13.5% of the total logistics costs.

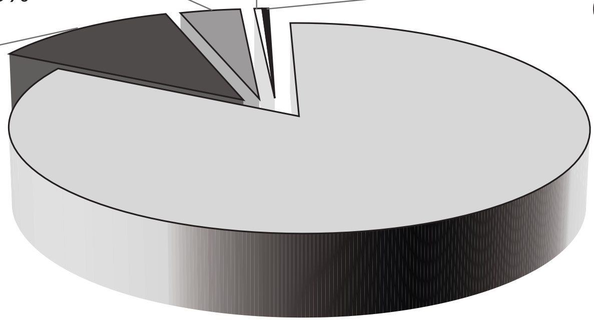
(3) Total fixed assets investments continue to increase

In 2005, total fixed asset investments (including investments in transportation, warehouse and storage, wholesaling, distribution, processing and packaging, and postal services) in the logistics industry amounted to 929.3 billion yuan in 2005, increased by 22.8% yoy. Although the growth was 4.2% lower than that registered in the previous year, it still stood at a high level. Exhibit 8 shows the composition of China's fixed assets investment in logistics industry.

Among the various logistics segments, transportation attracted the largest amount of investments in 2005 and hit 775 billion yuan (grew by 22.6% yoy), accounting for 83.4% of total investments. Huge investments in transportation can help ease the bottleneck in transport infrastructure. During the 10th Five-year Plan period (2001-2005), the length of railways in operation increased at an annual rate of 2.1%, which was 0.2% higher than the growth in the 9th Five-year Plan period (1996-2000); the length of highways grew at 6.7% annually during the period and the growth was 2.8% higher than that of the previous five years. In 2005, the total length of highways stood at 1,920,000 km, grew by 36.9% as compared to the end of the 9th Five-year Plan period. Meanwhile, 920 specialized berths designated for handling containers, crude oil, ore, coal, etc. were built in 2000-2005 (1.5 times the previous five years); of which, 188 have over 10,000 ton handling capacity (1.7 times the previous five years); and the handling capacity of new ports reached 540 million tons (2.1 times the previous five years).

Investments in warehousing and storage was 35.6 billion yuan in 2005 (increased by 4.4% yoy); investments in wholesaling totaled 110.4 billion (grew by 31.6% yoy); investments in distribution, processing and packaging was 4.6 billion yuan (up by 32.9% yoy); and investments in postal services amounted to 3.8 billion yuan (up by 2.8% yoy). Among these segments, distribution, processing and packaging yielded the highest growth of investment, indicating that logistics is increasingly linked to those add-on services. As will be discussed, bonded logistics park is one of the initiatives to put together logistics and those add-on services.

Exhibit 8: Composition of China's fixed assets investments in logistics industry, 2005



Source: CFLP

(4) Logistics industry playing an escalating role in China's economic development

a An important industry powering China's economic development

The logistics industry is one of the most important pillars powering China's economic growth. The total value-added of the industry stood at 1,214 billion yuan in 2005, up by 12.7% yoy; it accounted for 6.7% of China's GDP and 16.5% of the country's service sector value-added, increased by 1.4% and 3.5% yoy respectively. Hence, the direct contribution of the logistics industry to the country's economic growth has been increasing and will continue to increase. It shall be noted that the continuous development of the industry may also benefit the economy indirectly by: 1) saving up hidden costs resulting from, for example, good perishes; and 2) improving information flow so that production will be more market-driven.

b Modern logistics enhancing circulation efficiency

One of the far-most important factors enhancing the efficiency of China's distribution sector is the rapid development of modern logistics. According to a recent survey conducted by the National Bureau of Statistics, the average inventory growth of industrial enterprises above designated size dropped from 24.7% in 2004 to 17.9% in 2005. Another survey conducted by the China Logistics Information Center (CLIC) on the turnover time of current assets of 50 major producer goods distribution enterprises indicated that the average current assets turnover times increased from 2.6 times in 2004 to 2.8 times in 2005, up by 7.7%; meanwhile, the average turnover time of inventory grew from 12.4 times in 2004 to 13.4 times in 2006, increased by 8%. These show that modern logistics do enhance the overall efficiency of the distribution sector.

2 Major problems of the industry as reflected by logistics statistics

(1) Total logistics cost to GDP ratio remains high

At present, China's total logistics cost as a percentage of GDP stood at 18.6%, which is nearly double that of the developed countries (around 9.5-10%). The main reason behind this is that China is still at the middle of the industrialization process. Its GDP growth mainly comes from primary and secondary industries; tertiary industry only accounts for around 40% of its GDP (as compared to 70-80% in the developed countries). During the 15 years between 1991-2005, the total logistics cost to GDP ratio decreased at an annual rate of 0.36%; yet, during 2000-2005, it reduced by only 0.16%. Assuming the total logistics cost to GDP decreases at an annual rate of 0.3%, it takes at least 20-30 years to reach 10%! To quicken this process, China needs to speed up the development of modern logistics as well as accelerate the industrial restructuring process and put more emphasis on its tertiary sector.

(2) Low value-added for modern logistics industry

China's total logistics revenue is relatively low as compared to the scale of the industry, indicating that the business operation of logistics enterprises is narrow and the scope of value-added services is weak. Statistics showed that the average logistics revenue per unit of freight traffic in China in 2005 was less than 160 yuan/ton, which compared unfavourably to more than 470 yuan/ton in the US. This indicates that modern logistics services in China are lagging behind that of the developed countries.

(3) Supply unable to meet demand for logistics services

According to the CLIC, during 1991-2005, the country's freight traffic increased at an annual rate of around 10%, which was at least 5% lower than what was needed during the period. Hence, constraints on logistics supply still pose a major problem for the industry.

III. The 11th Five-year Program and China's logistics industry

This year is the first year of the 11th Five-year Program and also the first year the logistics industry fully opens up to the outside world. The 11th Five-year Program focused on six priority tasks, including 1) building a new socialist countryside; 2) accelerating economic restructuring; 3) promoting balanced development among regions; 4) striving to increase capacity of innovation; 5) deepening reforms and opening further to the outside world; and 6) building a harmonious society (for further information of the Program, please refer to our Newsletter Issue 30 *"The 10th National People's Congress – Highlights of the 11th Five-year Program and other economic updates"* – http://www.idsgroup.com/profile/pdf/distributing/issue30.pdf).

1 Highlights of the logistics industry in China's 11th Five-year Program

The followings are the major initiatives of the government towards the industry as stipulated in China's 11th Five-year Program:

(1) Improving the road transport infrastructure:
  a Improving the quality and establishing nation-wide road network;
  b Fostering the establishment of an extensive railway network;
  c Constructing a sophisticated water transport network, benefiting from its energy and cost efficiencies. In particular, the improvement of port facilities is being highlighted.

(2) Establishing regional logistics centres, distribution centres, information platform, etc.

(3) Developing a modern logistic industry, stressing on the application electronic information.

(4) Fostering the establishment of specialized logistics enterprises, particularly third-party logistics entepririses.

2 Implications of 11th Five-year Program to China's logistics industry

The followings are the implications of the current five-year program to the logistics industry:

(1) Total logistic value will continue to increase, resulting from rapid economic growth

As stipulated in the 11th Five-year Program, China's GDP is expected to reach 26.1 trillion yuan by 2010, up by 43.4% as compared to that of 2005. Rapid economic development accelerates the circulation of commodities, information and services, which in turn provides huge opportunity for logistics development.

(2) Expansion of foreign trade, leading to a flourishing international logistics sector

By 2010, China's total trade is forecasted to reach USD 2.3 trillion, up by 61.9% compared to that of 2005. An upsurge in foreign trade undoubtedly will increase the transaction volume of commodities and services. As a result, demand for higher quality and more efficient logistics services will rise as well. This also provides an unprecedented opportunity for the local logistics enterprises to enter the international market.

(3) Building a new socialist countryside requiring the support of modern logistics

Building a new socialist countryside is placed on the top agenda of the 11th Five-year Program, indicating its significance in China's future social and economic development. According to the Program, the country will accelerate rural development, including building a sound service sector for agricultural industry, perfecting the agricultural circulation system, extending the value chain of the agricultural industry and ensuring farmers can benefit in the end. Yet, the successful implementation of this policy lies largely on sound logistics infrastructure and effective modern logistics services.

(4) Industrial restructuring enhancing specialization of logistics industry

In China, around 86% of the total logistics value is derived from industrial products, indicating the importance of industrial product logistics in China's logistics development. This also goes in line with the country's rapid industrialization process. During 2006-2010, China will implement policies to upgrade its industries so as to promote further specialization of the logistics industry, particularly the industrial product logistics.

(5) A more balanced regional development leading to a new regional logistics regime

In the 11th Five-year Program period, the country will carry forward the development of the western region, rejuvenate the northeastern province, promote the development of the central region and encourage the eastern region to lead the country in future development. All these developments call for new thoughts on how to coordinate regional logistics development and how to develop the logistics industry in small and medium sized cities and rural areas.

(6) Energy conservation and environmental protection creating new forms of logistics services

According to the 11th Five-year Program, the government will place top priority to energy conservation and environmental protection and will hopefully reduce energy consumption per GDP by 20%. This is vital to the sustainable development of the country. To cope with this policy initiative, the logistics industry needs to consider new forms of logistics services. This has led to the emergence of the concept of 'green logistics' – a new approach in logistics management that goes beyond the standard logistics imperatives for efficient, effective and fast handling and movement of goods, but also takes into account measures for protecting the environment.

IV. Prospects of future development

1 A booming logistics industry

According to the CFLP, demand for logistics services will continue to rise, resulting from China's rapid economic growth. The total logistics value is forecasted to increase by no less than 20% in 2006, logistics value-added to increase by at least 15%; and logistics cost to GDP ratio to drop gradually. The logistics demand from the following segments will witness tremendous growth: automobile, electrical appliances, books, pharmaceuticals and fast moving consumer goods; while the logistics services for up-stream products such as steel, food, cotton, energy, etc. will gain more attention. Moreover, agricultural logistics, particularly the construction of logistics infrastructure is expected to be the focal point of attention in the coming year.

Moreover, China's status as the world's leading manufacturing powerhouse has provided huge development prospect for the logistics industry - as "Made in China" is driven primarily by "Source in China", leading to an increasing demand for logistics services.

2 Rapid expansion of foreign logistics enterprises in China

In the post-WTO period, foreign enterprises have experienced unprecedented progress in China's logistics industry, particularly in the following areas:

(1) Setting up wholly-owned subsidiaries instead of joint-venture companies. More international third-party logistics companies have started their operation in China. Meanwhile, they have started to penetrate into different areas across China.

(2) Investing in China's lucrative port sector, including container berth, shipping and freight forwarding business; setting up business in bonded logistics parks.

(3) Establishing major logistics infrastructure and expanding their presence in various parts of China. For instance, the four largest global logistics companies, including UPS, TNT, DHL and Fedex have set up express forwarding centres in major cities such as Beijing, Shanghai, Hong Kong and Guangzhou.

(4) Expanding industrial portfolio in China. The most typical example is ProLogis, which has recently signed several agreements to build new distribution parks at a variety of strategic locations across the country, including Beijing, Shanghai, Guangzhou, as well as the new markets of Qingdao, Hangzhou and Ningbo.

(5) Participating in the training of logistics expertise.

(6) Providing supply chain management skills, and supplying the software for purchasing and supply chain.

(7) Entering the logistics exhibition industry. The most typical example is the Germany-based trade fair organizer Deutsche Messe AG. It has organized a number of logistics trade fairs and exhibitions in Shanghai.

3 Regional logistics development gaining momentum

Consolidation of the logistics sectors has been taking place progressively in various regional economies such as the Yangtze River Delta (YRD), the Pearl River Delta (PRD), the Bo-hai Rim region, and the central region. A number of regional logistics centres and international logistics centres have been built in these regions. For instance, in the YRD, Shanghai is the logistics hub while the port region in Zhejiang plays an important supporting role in developing the region into an international logistics centre; the PRD, on the other hand, has vowed to build a Pan-PRD logistics network serving as the logistics platform for South East Asia and the rest of the world; in the Bohai-rim region, Tianjin will become the logistics hub in the Northern region; and the central region will make use of the geographical advantages of Wuhan and Zhengzhou to build a major logistics centre linking east-west and north-south.

4 A more competitive logistics environment

As mentioned, foreign enterprises have experienced unprecedented progress in China's logistics industry in recent years. Competition is thus heating up quite intensely. On the other hand, more and more domestic logistics enterprises are beginning to go global and participate in the international market. These "Bringing in" and "Going global" initiatives have led to a more competitive logistics environment, i.e. China's logistics industry is facing fiercer competition from foreign players. In the face of competition, logistics enterprises will undergo series of restructuring and transformation and ultimately expand their business scope. Meanwhile, they will focus more on building their reputation by providing high quality services.

5 A better regulated and well-developed logistics industry

As stipulated in China's 11th Five-year Program, the country will speed up the development of logistics industry. Indeed, the Central and provincial governments have been putting huge efforts in accelerating the development of the industry in recent years. A typical example is the *"Notice on promoting the development of China's modern logistics"* jointly released by nine ministries and commissions[1] in August 2004 clearly outlined the policy measures for supporting the development of modern logistics industry. It covered various areas including administration, management, taxation, financing and market opening, etc. On the other hand, the rapid development of standardization, statistical and technology has made significant contribution to the development of modern logistics.

6 Bonded logistics parks offering better logistics services

Bonded logistics parks (BLPs) were a recent addition to the plethora of bonded zones (or referred to as free trade zones) options available to both local and foreign enterprises. Today, there are eight BLPs in China - the first BLP was established in Shanghai's Waigaoqiao Free Trade Zone in 2004. Additional locations include Dalian, Zhangjiagang, Xiamen, Ningbo, Qingdao, Tianjian and Shenzhen (see Exhibit 9).

Exhibit 9: Eight bonded logistics parks in China

Source: Compiled by Li & Fung Research Centre

1 The nine ministries and commissions include the National Development and Reform Commission, the Ministry of Commerce, the Ministry of Public Security, the Ministry of Railways and Communications, the General Administration of Customs, the State Administration of Taxation, the Civil Aviation Administration of China and the State Administration for Industry and Commerce.

The new BLPs connect the bonded zones with nearby ports. The BLPs aim to integrate export processing, international trade, logistics, and port operations. The 4 proposed uses of the BLPs include: 1) importation of processed goods; 2) international transfer and consolidation; 3) international procurement; and 4) bonded distribution centre for domestic distribution.

The objective of building the BLPs is twofold, namely 1) to attract international goods flows so as to build China's own international ocean freight hubs; and 2) to improve logistics service for all the enterprises in these regions. With the formation of the BLPs, enterprises may now conduct true international entrepot trade and procurement. These BLPs are particularly attractive to enterprises performing bulk purchases in the Asian region who want to optimize their inventory velocity by using China as an international transfer, consolidation and procurement hub.

7 More emphasis is being placed on logistics industry – the launching of China's first modern logistics forum

Approved by the State Council, China's first modern logistics forum (the Forum) was held in 22-23 September 2005 in Shandong. The Forum has the blessings from the Central government - various government departments, including the National Development and Reform Commission, Ministry of Commerce, Ministry of Communications, Ministry of Railway, General Administration of Civil Aviation, General Administration of Customs, General Administrations of Quality Supervision, Inspection and Quarantine, etc. attended the Forum. The Forum provided an opportunity for the logistics enterprises and the governments to exchange views and make recommendations for future development of the logistics industry. The launching of the forum denoted that the country will continue to place huge emphasis on the logistics industry.