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Bingbing TAN, Wen LIU

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Master thesis in Logistics

Author:

Liu Wen

Tan Bingbing

Supervisor:

Fan Kewei

Chen Dayan

June 2008

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1 Introduction

1.1 Purpose of the work

The paper compares TPL industry in China and developed countries, then to give some suggestions. Firstly the paper compared Chinese TPL and developed countries' in terms of SCP. It would like to find the defect on SCP and give some suggestion; then the paper compared TPL on macro management and give some suggestions; finally summarize the total thought way of develop Chinese TPL.

1.2 Thought way of the paper

The paper has two main parts. The first part is to analyze TPL with the theory of SCP. It tries to find Chinese TPL's defect and give some suggestion. The second part is to analyze TPL with macro management view. Of course both of the two parts' analyze are through the comparison between Chinese and developed countries'.

2 Third party logistics industry

2.1 Logistics

2.1.1 Definition of logistics

Logistics, in its most basic definition, is the efficient flow and storage of goods from their point of origin to the point of consumption. It is the part of the supply chain process that plans, implements and controls the flow of goods. It can also be seen as the management of inventory, in rest or in motion. The word logistics was first used in the military service to describe the process of supplying a war zone with troops, supplies and equipment. The term is now used more commonly in the field of business.

A recent US study found that logistics costs account for almost 10% of the gross domestic product. The process itself covers a diverse number of functional areas. Involved in logistics are transportation and traffic, as well as shipping and receiving. It also covers storage and import/export operations.

Logistics is a globalizing action and what functions of logistics below will support it operation.

1. Purchasing - of raw materials, assembled products, finished products from all over the world. Where can you get the quality you want at the best price?
2. Manufacturing operations - how should the machines be organized, how many workers do you need, where do you stock your materials and finished products, how many products do you manufacture on each production run? And the list goes on ...
3. Transportation - domestic and international, from raw materials to finished product; who moves what, and when, and for what price?
4. Warehousing - product is either moving (transportation) or not (warehousing). This is becoming a very sophisticated area and a key to shortening the time to market for products.
5. Inventory control - how much product is on hand, on order, intransit, and where is it? Inventory drives logistics.
6. Import/export - international regulations and documentation can be complex. It takes a specialist to understand the best way to get product across borders.
7. Information systems - globalization on today's scale is possible because there is technology that transfers the needed information.

2.1.2 Development of logistics

Logistics can be defined as providing the right type of products and/or services at the right price, at place, time and in the right condition. A quick look back at some logistics history may prove very enlightening.

The birth of Logistics can be traced back to ancient war times of Greek and Roman empires when military officers titled as 'Logistikas' were assigned the duties of providing services related to supply and distribution of resources. This was done to enable the soldiers to move from their base position to a new forward position efficiently, which could be a crucial factor in determining the outcome of wars. This also involved inflicting damage to the supply locations of the enemy and safeguarding one's own supply locations. Thus, this leads to the development of a system which can be related to the current day system of logistics management.

During the Second World War (1939-1945), logistics evolved greatly. The army logistics of United States and counterparts proved to be more than the German army could handle. The supply locations of German armed forces were inflicted with serious damages and Germany was not able to wreak the same havoc on its enemy. The United States military ensured that the services and supplies were provided at the right time and at the right place. It also tried to provide these services when and wherever required, in the most optimal and economical manner. The best available options to do the task were developed. This also gave birth to several military logistics techniques which are still in use, albeit in a more advanced form.

Logistics has now evolved itself as an art and science. However, it cannot be termed as an exact science. Logistics does not follow a defined set of tables nor is it based on skills inherited from birth. A logistics manager performs his duties and responsibilities based on his educational experiences, skills, past experiences and intuition. These skills are nourished by a constant application of the same by him for the betterment of his organization. The logistics manager ensures that the company is benefited by an effective and efficient system of logistical management. He also needs to ensure that the right kind of products and services are provided at the right time and for a right price, whether inside the organization's premises or delivery of shipments outside the premises of the organization.

Logistics has come to be a kind of relief for many organizations that formerly looked upon it as a burden. Companies nowadays are hiring people with the requisite knowledge to deliver sustainable enhancements in the field of supply chain management. As has been the case throughout most of logistics history, the task of a logistics manager involves a clear vision and a drive within to deliver results under strict deadlines in addition to his usual responsibilities.

2.2 Third party logistics

Several months ago, I practice in DELTA companies in Suzhou. A logistics manager told me what Logistics Company is. The company which is no fleet and no warehouse, just control and manage logistics process could be called TPL companies. So the paper thinks it is necessary to study what is the TPL.

2.2.1 Definition of TPL

Third party logistics is the supply chain practice where one or more logistics functions of a firm are outsourced to a TPL provider. Typical outsourced logistics functions are inbound freight, customs and freight consolidation, public warehousing, contract warehousing, order fulfillment, distribution, and management of outbound freight to the client's customers.

2.2.2 Development of TPL

In the 80s, there was increased globalization and an increased use of IT. These trends resulted in increased demands on firms and possibilities for companies to operate more competitive and lean. Some successful TPL companies emerged, such as DHL/Ecel, Kuehne+Nagel, Schenker, UPS, Panalpina, C.H. Robinson, TNT Logistics, Schneider, and NYK Logistics. After several years development, some countries and areas have shaped their own special TPL formation.

- America: advanced service under market leading

- Japan: standard development under government leading
- Europe: renew and complete TPL again and again

In the middle of the 90s, the concept of TPL came to China. It's an important development of haulage, storage and such kind basic service industry. Because the effect of foreign TPL is so manifest, so a lot of Chinese firms take part in the area. While after several years' operation, there is no forecasting result. It is not so simple that you can establish TPL industry completely after change a name for traditional haulage and storage industry. It needs doing a lot of work and there is a long way to go.

2.3 Third party logistics industry

The definition of TPL industry should start from service of TPL. Who need the service are demand companies and who offer the service are TPL companies. The aggregation of all the companies, no matter needing or offering, we called Third party logistics industry.

Third party logistics service is a series integrated services which is provided by TPL companies with the guidance of contracts. That is the process of TPL companies' completing contract. Now, there are so many companies could offer TPL service and so many types of TPL service they can offer. In the paper, we divided the services into two parts.

- Basic logistics TPL services which include warehouse management and transportation management. Because these services are very simple, most of TPL companies could offer a part or the whole basic logistics services. So the competition is very hot.
- Value added TPL service is some customized service offered by TPL companies. This kind of service is beyond standard service. Innovation, customized and value added services are the essence character.

2.3.1 Demands for TPL

Industries outsource logistics which they done by themselves before to some TPL company. That's the demand for TPL. Here we can definite the demand as demand for TPL is industries like and able to outsource their logistics to TPL companies with suitable price and service level.

TPL service is a series integrated logistics service with the guidance of contract, so the unit of the demand for TPL is industry while not production and different industries have different demand. We can say TPL service can't have standard, it

offer customized service for industries.

2.3.2 Service of TPL

TPL's offering party is professional TPL companies. We can definite service of TPL as TPL companies are willing and able to offer TPL services with the guidance of contract under suitable price and service level. TPL service not only includes service from professional TPL companies, but also includes services from other similar logistics department, such as some traditional transportation and storage department.

2.3.3 TPL industry

All the TPL companies compose TPL industry. TPL companies here not only mean professional TPL companies, but also include industries which are like TPL companies, e.g. transportation companies.

3 TPL industry's SCP

3.1 SCP framework

Professor Mason and Bain state an analysis framework which is SCP framework that means the market structure decides the behavior of the companies in the market, and then the behavior of the companies decides the effect of the market operation.

The model framework includes three basic parts: market structure, market conduct and market performance.

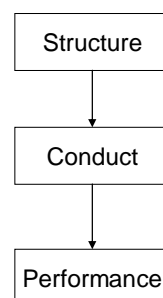


Figure 3-1 SCP framework

An industry's performance depends on conduct, while the latter depends on structure. The structure bases on some principle elements.

SCP framework is used in integrated analysis in terms of industry. It tries to find the

relationship among basic elements, market structure, market conduct, performance and authority policy. Then try to indicate to improve TPL industry.

3.2 SCP framework in TPL industry

Here, we want to apply SCP framework into TPL industry in order to form TPL's SCP frame work to be the basic theory of our study. We want to find the relationship among China's TPL industrial basic elements, market structure, industry conduct, performance and authority policy. Then comparing with and learning from developed countries', finally trying to give some suggestion on developing China's TPL industry.

The basic element is the foundation which decides industry structure, conduct and performance; basic elements influence industry structure, industry structure decides industry's conduct, conduct and structure decide industries' performance; authority will influence other four parties directly.

We can use a picture to show the relationship below.

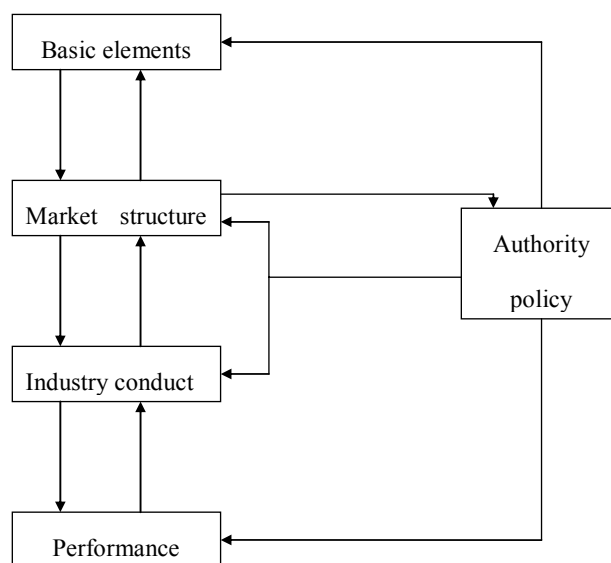


Figure 3-1 the relationship among basic elements, market structure, industry conduct, performance and authority policy

3.3 Guideline in SCP framework of TPL

3.3.1 Basic elements guideline

TPL basic elements include the actuality of demand and offer actuality which is the base for other TPL industry.

- Demand guideline for TPL:

Demand size for TPL-it means total demand quantity for TPL in some certain period and condition. We can estimate it as the total outlay of the industries which outsource their logistics or we can also estimate it as the total service earning of TPL companies.

Substitute of TPL - it means other operation way of logistics which can substitute TPL, such as 1PL and 2PL.

Demand flexibility for TPL - it means the scale that TPL demand changes by other elements changes.

TPL demand increasing rate - it means the speed of TPL demand scale. Usually the unit is year.

Purchasing TPL service's way - industry outsource logistics service usually means all or most of logistics action. The unit is industry.

- The offering guideline of TPL

The offering scale of TPL - it means the total quantity of the service that TPL companies are willing to and able to offer.

TPL technique - it means that different technique that TPL could in charge of when they offer TPL service, include logistics management technique and information technique.

TPL supplier - it is the owner of exterior resource that purchased by TPL companies when TPL companies offering TPL services. TPL companies could purchase services from 2PL and other TPL companies, so 2PL and other TPL are the potential TPL suppliers.

Economies of scale in TPL - it means that increase of benefit will exceed increase of scale when TPL companies enlarge their scale. In the operation party, we can say that when the operation increases a lot, the cost of running companies will be a little. TPL companies own the character of economies of scale as other service companies.

3.3.2 TPL market structure

TPL market structure means that the factor and character which constituted market. They are the relationship between vendors and buyers, vendor group and buyer group, existing buyers- venders and potential buyers- venders. In one word, market embodied the scale of market competition and monopoly. They are many decisive elements for market structure. The main elements are: concentration ratio, economy

of scale, and differentiation of product, barrier to entry and exit, increase ratio of market demand and price flexibility of market demand.

The guideline of TPL market structure means

- Quantity of TPL demand and offering (concentration ratio) - reviewing quantity of demand and offering party of TPL practically to judge if demand and offering party have ability to control the market; Concentration ratio usually represents several biggest TPL companies' market share in TPL industry. The guideline is suitable to be used in industry which has high degree of monopoly. But still now, China's TPL industry's degree of monopoly is low, so it is not suitable to use the guideline.

- Differentiation of production of TPL service - review the degree of differentiation of TPL which is offered by different TPL companies. Including differentiation in terms of quality and scale of service.

- Barrier to entry - review the barrier of new company's entering in TPL industry, including investment of fixed assets, supplant from existing companies and so on. In modern times, the new entering companies are almost 2PL companies in China, so there are little barrier in fixed assets' investment.

- Sizes of TPL companies - review the size of existing TPL companies. We can estimate them with registration assets, total assets and total TPL operation.

3.3.3 TPL industry conduct

Industry conduct means industry's production, sale and employment of capital in order to keep and develop. TPL industry conduct is decided by market structure and industry itself. It is complex.

The guideline of TPL industry conduct includes:

- Advertisement conduct - It means the conduct that TPL industries publicize themselves to the potential customs. The usual way is entity advertisement.

- Research and development conduct - it means the companies carry on research and development conduct for management technique and information technique in order to improve service level. Now, advanced TPL companies do it very well in China.

- Pricing conduct - it means that TPL companies' making price manner and strategy according to running and competing strategy.

- Merger and alliance behavior - It means integrated some TPL companies in order to enlarge companies scale, improve efficiency, enhance integrated logistics ability and reduce cost. The final purpose is to make it offer integrated service to different

companies.

- Product strategy - It means how to improve service level.
- Hardware investment - it means the investment in TPL companies' logistics equipment and information system.
- Annex and peace treaty - Annex means action that TPL industry purchase other TPL companies or 2PL companies. Peace treaty means that TPL companies make an alliance with other companies and 2PL companies with the way of peace treaty.
- Financing - Absorbing investment companies to invest logistics area.

The paper would like to illustrate some of them in details.

3.3.3.1 Pricing conduct

TPL's pricing conduct has some characters below:

Firstly, TPL conduction's price includes quite a lot specific assets. TPL is a professional industry. We can illustrate it in two parts. On one hand is that it needs professional logistics knowledge, technique and skill on planning, implement and organization. They are invisible professional assets. The investment return should be embodied in price. So in the beginning TPL companies' operation cost will higher than traditional logistics'. But one it is sure that following the enlarging of scale, the price will reduce even lower than traditional ones. On the other hand, TPL service is customized service. Their investment is professional, such as transportation, storage, network equipment and so on. These specific fixed assets' investment will be embodied in the price of TPL services. So TPL companies will consider the practice of fixed assets' value in price.

Secondly, TPL's price is the game result of supply party, demand party, TPL companies' cooperating party and competition party. TPL is usually competition market. Competition is an important conduct of TPL. So when TPL companies offer the same logistics service, there will be competition in terms of price. Usually there is no monopolistic price. Furthermore, there are price game between supplier and demand party. Demand party have two kinds of advantages. One is TPL is substitutability. When they can't accept the quotation of on supplier, it's easy for them to change another supplier; the other is demand companies could show that they won't outsource their logistics which can control the price.

Thirdly, TPL product's price is the average one of the repeating transaction. In the process, demand companies outsource their logistics have some transaction cost. Once the demand companies choose a TPL company, they will sign the contract for more than one year. They want to establish stable and long term cooperation

relationship. In cooperating period, their transaction is repeated. TPL service's price changes followed the costs' change, but the price is negotiated by the two parties. So TPL's price is the average price after repeated transaction in terms of cooperating process.

3.3.3.2 Merger behavior

Following the development of globalization, the barrier of international trade is reduced. We can say that the system barrier is overcome. The information technique improved a lot, so cargo's flowing become smoothly. It makes the globalization easier and the demand for international TPL services become more and more strongly. It brought both of opportunity and pressure for TPL companies. If TPL companies didn't accumulating quite a lot capital and expanding scale, then they can't get the comparative advantage. So as expanding strength, as keeping comparative advantage, which are both of the internal power and external pressure. Usually speaking, TPL companies have three ways to enlarge their scale. One is internal development, which is to say developing the internal potential in terms of running. Investing some new companies and developing; another way is merger and acquisition. That means acquire the existing economic scale, operation ability, sale network and professional technique through merger and acquisition. It is a large scale of entering way; finally, is alliance.

For TPL companies, the mode of internal developing has some limitation in terms of entering barrier, so it is difficult to enlarge. Its speed of accumulation which is in order to practice expanded reproduction can't adapt the globalization of demand for TPL. We can say there are some limitations in internal development. Merger behavior could not only enlarge the scale of companies to enhance the ability of global offering, but also it can reduce risk and cost. They can also get new technique from service network and logistics market and improve logistics offering ability and efficient.

3.3.3.3 Alliances

TPL has some characters, such as specialization, scale, information, contract and system. These characters embodied that TPL can't practice the customized and large scale logistics. Transaction cost could work out the problem such as being unprofessional and lack of capability. But the short-term transaction cost is quite high. So it has some limitation in terms of service quality and service efficiency. Internalization could reduce cost efficiently, meanwhile enhance offering ability and competing ability. But the internal organization cost will increase. TPL alliance could offset the defects. It could reduce cost, risk and improve service level through long term contract. They can also improve the utility rate through complementary advantages. So alliance is an important behavior for TPL companies.

There are two kinds of alliance.

Intra-industry alliance means the stable intensive cooperation among TPL companies. It is the long term cooperation behavior among the integrated TPL companies, professional TPL companies, non-assets agent TPL companies. The intra-industry alliance could integrate logistics resource, reduce cost, improve efficiency and enlarge market share. Meanwhile it can avoid the phenomena which called organization failure and culture conflict between companies caused by the large scale of company.

Cross-industry alliance main point the long-term cooperation between TPL companies and IT companies. TPL was established on the base of modern information technique and network. Electron information and network technique are the base and competitive advantages of TPL. There are two ways to get the latest logistics technique: one is to develop and maintain logistics technique by TPL themselves. The other is to cooperate with logistics technique companies which study software in order to utilize advanced technique. That is the cross- industry alliance between TPL companies and other industry.

3.3.4 TPL industry performance

We have some points of view to evaluate industry performance. In the party of industry, we consider price and benefit firstly and in the view of society, we'd like to consider quality of production and influence for society benefit.

The TPL performance guidelines are:

- TPL service price - it means that the price for TPL companies' service when TPL companies offering services. It can estimate as total price and single price in ever process.
- TPL industry profit - it means TPL industry's whole profit. We can get it through adding all of the TPL companies' profit in terms of offering TPL service. Now many TPL companies have some other logistics services, so it's hard to state, so we need to deal with data.
- TPL service quality - It means the TPL service level that TPL companies can offer. We can estimate them as punctuality, rate of damaged cargo and customer satisfactory degree.
- TPL technique's progress - it means the ability that TPL companies could offer TPL service, the promotion of efficiency. These embodied on logistics management degree and the improvement of information system's ability.

3.3.5 Authority policy for TPL

That is authority's conduct of carrying on micro-management with some purpose. The main guidelines are:

- Industry control - it means the control for TPL industry's entry and price.
- Revenue and allowance - it means the authority's favorable revenue and allowance policy for TPL industry in order to support TPL industry. Now in China, the authority is preparing to adopt the favorable policy to TPL companies.
- Investment encouragement - it means authority's encourage policy in terms of investment in order to support TPL industry, including favorable credit, revenue reduction and so on.
- Finance policy - It means that the authority adopt some micro finance policy in order to improve TPL industry, e.g. leading to construct logistics center and finance allowance.
- Antitrust - that is anti-monopoly, TPL industry haven't formed monopoly, so there is no example.

4 Analysis of TPL industry in China

4.1 The actuality of TPL in China

4.1.1 Analysis of demand for TPL

TPL accounts for average 5% of the whole logistics in the world, even though in developed countries, the percentage is around 30%. First of all, most of demand in terms of logistics was met by industrial itself, because we don't have a mature logistics industrial. We should be sure that not all the requirements are TPL requirements. Secondly, the demands should not only means modern demands, but including potential demands. Therefore, our analysis of demands should not only focus on today, but we should notice the development of TPL. Finally, the demand for TPL is not only in terms of storage and transportation, but is also some added value service.

Here the paper would like to introduce some basic guidelines:

- TPL scale

In 2006, Chinese total TPL cost is ¥3,841,400,000,000, the ratio with GDP is 18.3%, it has large potential.

- TPL's increase

The table below could show the actuality of companies' outsourcing their logistics, it means the demand for TPL.

Table 4-1 TPL's increase situation

Year	Outsourcing (%)	Not outsourcing (%)
2004	35	65
2005	37	63
2006	42.6	57.4

From the table above, we know that companies outsource their logistics more and more. The demand for TPL becomes more and more.

- TPL's distribution structure

It usually located in eastern coastly area.

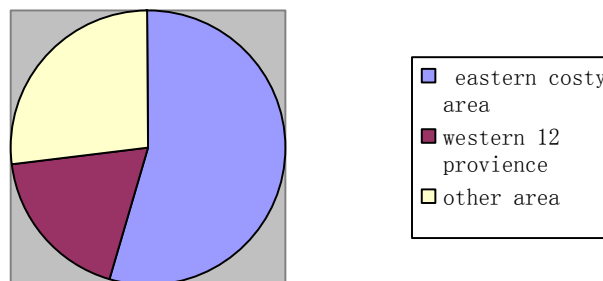


Figure 4-1 The distribution characters

- The substantial of TPL — 1PL and 2PL

There are three operations way for TPL: companies operate and manage logistics themselves; traditional logistics companies operate and companies manage themselves; companies supervise TPL, TPL operate and manage logistics. The first two ways are the substation for TPL.

4.1.1.1 The demand subject of TPL market

The industrial who has already or is to adopt to TPL is the subject in TPL market.

- Demand subject of TPL's distribution character in China

Demand subject of TPL's origin.

The demand subject in Chinese TPL market has three main parties below.

Firstly, the three types foreign-invested enterprises in China. In China, TPL is posed by advanced foreign-invested which result to three characters: A, TPL is implemented by some south-east inshore cities which is developed and more opened; B Chinese TPL is posed by some large scale multinational companies, just as IBM and P&G; C At first, TPL firms also offer services to these foreign- invested multinational companies. Multinational companies try to realize logistics localization in order to get competitive advantages, so foreign- invested companies doesn't establish independent logistics department when they take part in Chinese market while they'd like to choose several professional TPL companies to get logistics services through contract and tenancy. We say that the three types foreign-invested enterprises promoted Chinese TPL and to be the main demand subject for TPL.

Secondly, local rising middle or small companies in China, mainly to be some private high-tech companies. Most of these kinds of companies' production are small batch and high increment. They need logistics services being high timeliness, veracity. They need outsourcing logistics in order to reduce cost.

Thirdly, a part of activity state-own enterprise. Confronting active competition, some traditional state-own enterprises break down the old convention which is "big and comprehensive, small and comprehensive". They reconstruct their traditional logistics activity in order to get more competitive advantages. In this process, they mainly carry on two manners: one is to rebuild their traditional management and logistics technique with modern management. Another way is to peel off logistics and make it to be independent or outsource logistics to some professional companies.

Demand party's industrial distribution character:

We have a data, in 2000, manufacture enterprises outsource logistics take 18% of the whole manufacture industrial. While in 2001, the number is 21.

For business industry, in 2000, the number is 5.95%, in 2001 it is 13%.

After comparing, we know that requirement for TPL in manufacture industrial is much more than business industrial in China. It's own to that manufacture industrial is opened firstly in China. We can say that manufacture enterprises are the main demand subject for TPL in China.

The manufacture enterprises' demands for TPL mainly are companies which are about food, electron, communication, medicine, household appliance, motorcar and rag trade.

Business enterprises' demands for TPL mostly are companies are about chain supermarket and EB.

Demand subject's area distribution character:

The area distribution is unbalanceable.

The demand subject for TPL mainly distribute around east inshore area in China.

Most resource distributes in western of China while eastern's productivity is developed, so usually it's necessary to carry the resource from western to eastern. Then the production should be sold to all parts of the country, so it needs high effective logistics. Furthermore, eastern is the national passage of mainland. Most foreign trade production enters in China from eastern channels. We can say eastern area is active in terms of logistics, in another words is that requirement for logistics is much more.

- The basic condition of demand subject in terms of logistics

Logistics equipment

A. In 2001, production enterprises' retain ratio is below

- Fleet: 73%
- Warehouse: 73%
- Mechanization equipment: 33%
- Special railway: 3%

Commercial enterprises:

- Fleet: 36%
- Warehouse: 36%
- Mechanization equipment: 7%
- Special railway: 0%

From the above data we know that the retain ratio of industrial's logistics equipment is quite high. It is because the influence of concept which is "big and comprehensive, small and comprehensive". Additionally, it's invested by authority and has right of using land freely, therefore most of industrial set up warehouse, fleet and so on which are the main reason result to that companies would like to meet their logistics requirement themselves. We can say that is the barrier for industrials' developing TPL, so it's necessary for both of industrial and TPL firms to consider how to deal

with industrial's origin establishment and staff.

B. Logistics equipments are lagged and can't satisfy tasks.

Table 4-2 The actuality of logistics equipment

Reason	Transportation equipment	Handling facility	Warehouse
aging	15%	10%	19%
Backward equipment	8%	17%	16%
Total	23%	37%	35%

A lot of industrial usually use some old equipments to match with newer equipments, so it is not harmony. If you want to improve the effect, it must renew and rebuild logistics equipments. In other words, it offers opportunities to TPL companies.

The utilization state of information techniques

We have a data of the utilization of information technique below.

Table 4-3 Utilization of logistics technique

Contents		Industry type		
		Manufacture	Wholesaler	Retailer
Bar code	All the production adopts bar code	73%	68.8%	61.2%
Tally method	Manual	90.8%	81.2%	74.6%
Internet technique appliance	Companies establish local area network	44.7%	31.3%	62.7%
	Companies publish production information on internet	56.7%	31.2%	38.8%
	Companies offer online shopping way	13.5%	12.5%	17.9%

4.1.1.2 Demand contents for TPL

Traditional storage and freight companies could only do some single work, while TPL companies dedicated in integration operation.

- Freight and some extension service

There are some changes when companies choose the way of freight. Companies consider more and more about quality elements. They demand high efficiency and high speed. The demand for railway which needs long time become less and less. While the demand for highway which is good at speed become more and more.

Door to door service will be the mainstream.

Door to door service way need integrating different freight way's advantages in order to guarantee the process to be efficient and optimized.

Value added freight service will be the core of freight service.

- Storage and some extension service

Warehouse safekeeping demand. It need most demand. Although there is a lot of leisure warehouse equipment, yet it is not mean that there are exceed warehouse. According to the analysis before, we know that the problem is that the equipments are backward; they can't meet the demand of companies. They can't make customized service. After all, the storage have some development space, but it should be done some technique improve and structure change in order to meet the demand of companies.

Inventory management and control. In China, the turnover period is too long, so the period that production staying in the warehouse is long. That makes the cost of logistics being high. So inventory management should be more and more important.

- Distribution processing service

In fact it is an active which is the extension of storage management. It can joint no product no difference and customization, so it is very important for companies.

4.1.2 Analysis of TPL's service in China

Conclusively speaking, TPL service party has some characters

- They usually do some internal business
- They usually dedicated in storage and freight business, the integration ability is poor
- Most of TPL companies' scale is small
- The equipment and technique is backward

4.1.2.1 TPL companies' origin

Socialized and professional TPL services' undertaker are logistics companies which are the competing subject and demand object in TPL market.

In China, we can divide TPL companies into several types below

- The regional logistics companies which evolve from traditional transportation companies or storage companies

It points regional warehousing and transportation companies. They usually rely on their original warehousing system and they have their own fleet to offer basic logistics services and value added services. Although this kind of companies has some relationship to some other original fraternal companies, but not too close to form network. The structure and equipment of these companies' warehouse are very old. Some of them use storied building, so it is not convenient to those companies who rent upstairs. Most of companies focus on traditional, isolated and single basic operation in terms of management and realization on logistics services. But their charges are low. Following the fiercer competition, they improve their ability ceaseless in order to fit the demand of customers.

- Logistics companies evolve from national state-owned enterprises in a certain area

For instance Sino-Trans, China post, railway system and Cosco. They are leader or monopoly in their separate industries. The scale is very large, capital is abundant and the equipment is better. Although they are national companies, but the local subsidiary companies' accounting are independent. Therefore, most customers can't enjoy all-round cooperation. These logistics companies nearly can offer all of the basic logistics and partial value added services, but the price are usually higher than warehousing and transportation companies. They don't pay much attention to the demand of customers and the flexibility is low.

- Large cross-regional foreign-investment Logistics Company

There are not too much about this kind of companies because of the limitation of policy and law. In fact, they are powerful in logistics industry. They have advantages in terms of equipment investment capital, concept, talents, experiences and management ways. Usually they can offer integrated and cross-regional services. There are some problems that this kind of companies is located in North east inshore China. Their customers are three property business enterprises. We have to say their benefit is high.

Here, we should note one thing that some of this type of companies have no their own fleet and warehouse. They usually do some proxy service through subletting and pooling to do cooperation. They can improve the utilization of free domestic equipment to reduce their investment on fixed assets. But in another way, their cooperating companion's capability, charge and two side's communication could bring some threaten to them.

These types of companies are: EAC, sea-land.

- New cross-regional domestic-capital Logistics Company

As new entry to market, they are usually established following the trend of logistics demand. If they want to develop, they have to be beyond traditional logistics

companies. We can say new logistics companies are usually professional TPL companies. A lot of new logistics companies adopt to non-assets TPL agent mode in order to avoid huge equipment investment and long return.

The new domestic logistics companies have the ability to compete with the foreign-invest companies. Especially in local market, they are more adaptable and flexible. But they are poor on management and dealing with information technique. Meanwhile, their operation are not done completely y themselves because of the limitation in terms of capital. So their cooperating companions' capability and charge will influence them.

The typical company is P.G. Logistics Group.

4.1.2.2 TPL service's contents

In this passage, we will divide TPL activity into five parts.

- Transportation operation

- A. Plan and design for transportation network

For a international cross- regional company, purchasing, production sale and after service is very complex. We can say it's very hard to design a efficient network. In some advanced TPL companies, there are groups of experts to design transportation network through computer mode. In the more complex net work design, we have to consider the problem about the industry and warehouse.

Most of TPL companies in China don't have the capability to design transportation network. Although they have the operation in this part, they will rely on their experiences while not computer mode.

- B. One-stop transportation service

One- stop transportation service is the integrated combination of several transportation sectors. They can also offer door- to- door service through multimodal transportation way.

- C. Outsource transportation partly. In this types of service, customers outsource their transportation partly. They keep TPL companies offering fleet and staff, but they control and manage the transportation process themselves.

- D. Manage transportation capability for customers. Customers have their own fleet and staff which are to TPL companies. Using and maintaining machines and distributing staff.

- E. Flexible transportation plan. It means arrange vehicles and staff reasonably according to companies' purchasing production and sale.

F. Distribution. In fact distribution is the integration of warehousing and transportation. In China, sometimes distribution is posed as an independent program, because China's logistics not work is not perfect.

G. Customers-declaring

During international logistics operation it usually has some customers- declaration operation. Now in China, this kind of operation is always handled by some professional customers- declaring company of international freight forwarding. TPL usually don't have right to declare customers.

- Warehousing and distribution

- A. Design for distribution network. It includes location of warehouse, design for system and distribution center's ability.

- B. Order processing. Customer companies complete picking, distribution and sending through TPL.

- C. Inventory management. Inventory management is the core of logistics management. Complete inventory management contain market sale, marketing, purchasing and logistics. Usually industries can't outsource their inventory management to TPL companies completely. They will forecast and plan the whole process while TPL companies carries on them.

- D. Warehousing management. It usually includes charges' carrying, loading and storage.

- E. Package Package is the important content. Following the innovation of logistics modal, package added a lot of new operation.

- Information services

In western, information services are very important service part. But China's information service base is weak, so it hasn't got the attention.

The contents of information service

- A. Information platform service

Customers realize the connection with customs, bank and companion through information platform to complete electronic of the logistics process

- B. Logistics business's information processing services. A lot of companies are willing to use TPL companies' information processing systemE.g. inventory management, transportation management, distribution management and order processing

- C. Tracing for the transportation process. It usually focus on the

transportation process' tracing

- Integrated planning

Now we have a trend that we attributed the integrated planning as 4PL's service area. It appears as an independent and professional area. But in fact, TPL companies have the ability to offer logistics' integrated planning.

- Value added services

- A. Postponement

Postponement is an advanced logistics mode. In the manufacturing Process, the standard part should be completed on production line. About the customized part, it should be produced and processed according to customers' demand.

- B. Complete sets of parts

It means to complete the preassembling different parts before they enter in the production line.

- C. Supplier management. It usually includes choosing suppliers, inspecting quality of suppliers' production and payment for suppliers

- D. Advance freight

In the process of offering logistics services, TPL companies usually pay the advance fee for customers.

- E. Supporting JIT management

They can do purchasing production be on time.

- F. Consultative service

TPL companies can offer analysis of logistics, design for process, equipment's location, and transportation way and information systems' plan

- G. After service

That is a new service area. Usually includes maintenance marketing investigation.

4.2 The structure of TPL industry in China

There are some important elements which can consist TPL's industry structure: concentration ratio, economy of scale, and differentiation of product, barrier to entry and exit, increase ratio of market demand and price flexibility of market demand.

4.2.1 Concentration ratio

Concentration ratio is the sum of some biggest companies' market share in the industry. The formula is

$$CR_n = \sum_{i=1}^n S_i$$

S_i means the i th company's market share.

n means the biggest n companies in the market.

Concrete speaking, we usually analyze 4 largest companies' market share and 8 largest companies' market share, that is CR_4 and CR_8 . The guideline of CR_R is between 0 and 1. The larger that numbers will be, the higher that market share will be. Bain has shown the standard in terms of measuring market share.

Table 4-4 Market structure and measure standard

Type	Market structure	Measure standard
1-a	Very highly concentrated	$CR_4 \geq 75\%$ $CR_8 = 85\% - 90\%$
1-b	Highly concentrated	$CR_4 = 65\% - 75\%$ $CR_8 = 85\% - 90\%$
II	High concentrated	$CR_4 = 50\% - 65\%$ $CR_8 = 75\% - 85\%$
III	High moderate	$CR_4 = 35\% - 50\%$ $CR_8 = 45\% - 75\%$
IV	Low moderate	$CR_4 = 30\% - 35\%$ $CR_8 = 40\% - 45\%$
V	Low grade	$CR_4 = 10\% - 30\%$
VI	Atomistic	$CR_4 < 10\%$

Table 4-5 2002-2005 CR

Year	2002	2003	2004	2005
CR_4	0.042	0.045	0.052	0.06
CR_8	0.052	0.055	0.063	0.07

From the table above, the concentration ratio of the largest 8 companies increased though, but the ratio is limited. In 2005, CR_8 IS 0.07 and CR_4 is 0.06. We see China's concentration ratio of logistics market is low. So it belongs to atomistic market according to Bain's theory.

4.2.2 Differentiation

The companies competitions are mostly rely on industries' differentiation. For logistics industry, different business area has large differentiation. So we can say differentiation in terms of logistics area can enlarge customer group and improve gross benefit. Then to create market power for logistics companies which get differentiation.

Recently year, although logistics industry develops quickly, yet the business area is too single. Most of TPL dedicated in transportation and storage services. In 2005, 85% of TPL companies carry on transportation and loading business. The companies who has large logistics network, advanced equipment and management system are not much. Until now, only 17.3% TPL logistics some value added logistics services. The single logistics business make a lot of TPL companies compete strongly in some low- end area which can result to the average benefit of logistics industry is low.

4.2.3 Barrier to entry

Barrier to entry means the sum barrier when companies enter a certain market. That means the existing companies' advantages comparing to the potential incomer.

In China, it is very easy to enter the logistics market. There are no special policy limitations and the starting cost is low. So in modern logistics market of China, small or middle scale logistics companies are much.

While some high end logistics market's barrier is high. If new TPL companies want to enter high end logistics market, they have to break down a series limitation of talent, technique, service, capital and customer network. Low end logistics market absorbs a lot of potential entrants to choose because its barrier is low. So it forms a phenomenon that it's lack of companies in terms of high end logistics market while it's excessive in terms of low end logistics market. Meanwhile the actuality that the great disparity between low end and high end logistics market make the flowing barrier from the low end to high end to be high. Those companies who have entered

low end logistics market can't shift to high end logistics market successfully and they can't exit from low end logistics. It caused that the low end logistics market is crowded.

Table 4-6 Barrien to enter TPL industry

Program	High end logistics market	Low end logistics market
Talent	Professional technique	Basic technique
Technique	Information, modernization	Backward
Service	Integration, specialization	Single
Capital	Large input quantity	Little input quantity
Customer network	Close	Loose
Market	Enough space	Over crowded
Enter barrier	High	Low

4.3 Market conduct

Market conduct means various decision conducts based on considering the relationship with other companies and supply- demand condition. It includes pricing behavior, product strategy, research development, marketing strategy and firm's interaction in industry. Logistics industry conduct means the strategic conduct that TPL companies adopt in order to get much more benefit and market share or other strategic target according to the supply and demand condition. Logistics market conduct usually include three parts contents which are pricing strategy, marketing strategy and organizational adjustment.

4.3.1 Merger behavior

In modern time, global merger behavior has been a trend of developing logistics companies efficiently. Chinese TPL starts to integrate logistics through merger. One way is the merge between foreign companies and internal companies, for instance, UPS merge the joint venture of Sinotrans and UPS. Another is the annex between internal companies. For instance, China ocean shipping group company purchases two companies in Shanghai. But merger in China's logistics companies is small scale. The merger case is very little.

4.3.2 Financing

In China, excepting some large scale TPL companies, some medium and small TPL companies' financing ability are limited. Finance and investment organization usually don't take part in it. We want to take list companies to be an example. In China, there are around 40 list companies could offer logistics service, but a few of them are major to do logistics.

4.3.3 Pricing

Most of Chinese companies use the pricing manner called cost plus. It is decided by market structure and supply-demand status. The concentrate ratio of China's logistics market structure is low. Low- end supplier's offering scale is small. The market situated supply exceeds demand. There are no decisive monopoly large scale companies. Furthermore, TPL companies can't be in charge all the demand and fee of market because they can't get complete information. They can only make the price according to the manner of cost plus.

Low-end market's concentration ratio is low. TPL companies' exceed entering causes strong competition which makes the benefit reduces. Some small companies decline service level in order to decline cost, even to do some violation operation. It interfere the normal competition of the market. While in high- end market, companies will be price- leading. For some value- added business, it usually adopts price- leading. It usually has some profit space, so the price competition is not serious.

4.3.4 Production strategy and sale strategy

In China, TPL companies' production strategies pay attention to adopt new technique, for instance, technique of information recognition, production tracing technique, professional logistics. All of them could help to improve Chinese TPL companies' service efficiency and quality. But there are still some defects in terms of differentiation and production strategy. Only a little TPL companies adopt value-added production strategy.

For sale strategy, more and more TPL companies do some advertisement through media and establish their own website to do logistics service. TPL companies begin to focus on manage the relationship between clients. They improve their after service and offer more value added service.

4.4 The performance of TPL industry in China

Logistics industry's performance means the status of resource allocation efficiency in the vested market structure and benefit distribution which is caused by its market conduct. TPL industry performance reflects the integrated efficiency of the logistics industry and the rationality degree of China's logistics market structure and conduct.

4.4.1 The total assets of TPL industry

Most of China's TPL companies' scale is small.

- The investigation which focus on mid-eastern China in 2004

- There is 48% companies' asset scale to be between 5,000,000 to 10,000,000 RMB.
 - There is less 13.6% companies' asset scale to be less than 5,000,000.
- While after adding the sample of western China's city in 2005
- There is 49.73% companies' asset scale to be between 1,000,000 to 10,000,000 RMB.
 - There are more than 15% companies' assets to be less 5,000,000.

The investigation above is limited in large and medium cities.

4.4.2 Assets liability ratio

TPL is a new industry in China and TPL companies usually has short history. Most of TPL company uncommitted assets' scale are not large and the credit of enterprise loan is not sufficient. So it is difficult for TPL companies to finance from banks. It can cause the ratio of own funds in TPL companies are very high. In 2005, there are 58.38% companies' own funds ratio could be over 90%. It has 18.09% companies' own funds ration could be 70%- 90%. The low assets liability ratio could reduce risk in terms of finance, while the capital efficiency is not high in the industry.

4.4.3 Incoming status

The incoming of TPL companies increased gradually in recent years. But the companies whose incoming is over 5000 are not too much. In 2005:

- There are 50.78% TPL companies' incoming is between 5million to 10million.
- There are 14.56% TPL companies' incoming is less than 5million
- There are only five list TPL companies' incoming is over 100million.

I want to say the five list TPL companies increasing ratio in terms of incoming, it means their expansion capability improve a lot.

4.4.4 TPL industry's profit margin

Although TPL industry develops a lot in recent years, yet most of TPL companies offer low end service, such as storage and transportation business. It makes the competition of storage and transportation operation seriously. The serious price competition reduces the profit of the industry. We have a data in 2005:

- There are 4.17% TPL companies' profit margin is over 21%;
- There are 8.33% TPL companies' profit margin is between 16%-20%;

- There are 13.89% TPL companies' profit margin is between 11%-15%;
- There are 26.39% TPL companies' profit margin is between 6%-105%;
- There are 47.22% TPL companies' profit margin is below 5%.

The companies who has high profit margin dedicated in integrated business. While the companies whose profit margin below 5% is mostly to do some single operation.

5 Analysis of TPL industry in developed countries

5.1 TPL in American

5.1.1 The status TPL in American

In American, TPL develops very fast.

Steven E. Leahy and some other person investigate 51 TPL companies who are advanced in the industry. Then they get some data from it.

The investigation required companies answering some information related to companies.

The foundation year is from 1904 to 1994, the median is 1986 which is shown in table 5-1.

There are about 2/3 companies establish since 1980, that is to so after the liberalization of airline, highway and railway in American. Table 1 also shows that the development of TPL companies is very fast. Nearly half of the companies are established in recent ten years.

The incoming of TPL companies are totally different. It is from 1 million to 1,4billion the medium is 35million. The table shows that half of the companies incoming are less than 5000, wile there are more than 10% companies' incoming more than 5 billion.

The investigation also asks the companies offer the forecasting incoming in ten years. All the companies express that the incoming will increase and the ratio will be 10%-99%, the medium will be 42%. Even more than 20% companies said their increase ratio will be more than 100% in recent 3 years.

Investigation also includes the number of staff. The number is from 2-8000, the medium is 250. From table 5-1, we know there are a lot of small and large TPL companies, while middle scale ones are less.

Table 5-1 Companies' information

Establishment year	Year	%	Medium
	Before 1980	35.1	1986
	1980-1984	8.1	
	1985-1989	24.4	
	1990-1994	32.4	
Incoming (000.000s)	Incoming	%	\$35000000
	Less than \$10	26.7	
	\$10-\$49	30.0	
	\$50-\$99	3.3	
	\$100-\$499	26.7	
	More than \$499	13.3	
Planning increasing ratio in 3 years	Ratio (%)	%	42%
	0	0.0	
	1-24	24.3	
	25-49	27.1	
	50-74	8.1	
	75-99	18.9	
	>99	21.6	
Staff number	Staff	%	250
	<100	38.9	
	100-499	25.0	
	500-999	2.7	
	>999	33.3	

TPL companies could be divided by two kinds: assets and non-asset companies. TPL companies who has its own assets could offer some certain logistics services. The non-asset TPL companies are some management companies. They don't have their own assets or they rent assets. They offer human resource and system. Table 5-2 shows that assets companies and non- asset companies are almost the same number.

TPL companies could complete a lot of different task. Table 5-2 shows that only 15% companies offer business are less 10. There are more than 2/3 companies could offer more than 20 kinds of TPL companies. The medium is 18. It means TPL companies could offer large quantity services.

Table 5-2 shows some usual and unusual services. There are 75% companies offer 10 kinds of service, including EDI, management, logistics strategy and system and so on.

Table 5-2 Business information

Business type	Type	%	
	Assets	48.6	
	Non-asset	51.4	
Number of service kinds	Number	%	
	0	0.0	
	1-5	2.7	
	6-10	13.5	
	11-15	10.8	
	16-20	37.9	
	>20	35.1	
	Medium=18		
	Commonest TPL service	Service	%
Develop logistics strategy/system		97.3	
EDI		91.9	
Management manifestation report		89.2	
Loading		86.5	
Choosing carrier, deputy companies and customs agent		86.5	
Information management		81.1	
Storage		81.1	
Consult		78.4	
Payment for freight		75.7	
Negotiation for freight		75.7	
Uncommonest TPL service		Purchase overseas	18.9
	International communication	18.9	
	Export permission	18.9	
	Letter of credit	13.5	
Satisfaction	Satisfaction degree	%	
	1-24	0.0	
	25-49	2.8	
	50-74	8.3	
	75-99	86.1	
	100	2.8	
	Medium=82.5		

5.1.2 The developed trend of TPL in American

- Demand party for TPL : Internationalization and information

In 2002, 65% companies of fortune 500 outsource their logistics to TPL companies. The commonest businesses are custom broker, cargo payment. Many demand

companies want to get some information support. Their requirement for quality of TPL is higher and higher, the scale is larger and larger.

- TPL companies: Internationalization and supply chain management

5.2 TPL in Europe

5.2.1 An investigation for Europe Alliance of TPL

In 1994, 5 universities in Europe cooperated to investigate 50 TPL demand companies and 20 TPL service companies. They trace the companies since 1998.

A. Definition of logistics alliance

- More than one year's cooperation
- Having both of freight and storage business
- Having the only service supplier

B. The motivation of developing Europe alliance

- Corporate restructure
- Collapse of bounders
- Increase of market distance
- Improvement for freight network

C. Data from investigation

- Operation assets

There are two kinds of operation assets: share and specific

Table 5-3 Operation assets

	Consumer goods	Industrial product
Share assets	39%	71%
Specific assets	61%	29%

- The regional scale of TPL companies

It could be divided into two parts: domestic and international

Table 5-4 The regional scale of TPL companies

	Consumer goods	Industrial product
International	30%	61%
Domestic	60%	39%

●The resource of TPL companies

Table 5-5 The resource of TPL companies

	Agent	Freight	Storage	Others
International	46%	4%	46%	4%
Domestic	12%	13%	66%	9%

●The width of TPL service (quantity of answer)

Table 5-6 The width of TPL service

Purchasing	Raw material logistics	Concentrative operation	Product logistics	Distribution logistics
12	46	44	86	23

●The depth of TPL service

Table 5-7 The depth of TPL service

Basic scale	Management and control	Information technique and information system	Value added
97	47	40	27

●The problem that TPL companies worried about -- before alliance

Table 5-8 TPL companies worried (before alliance)

Not familiar the business of the company	Not suitable the information system	Risk	Opposite from staff	Supplier can't do very well
36%	24%	22%	21%	18%

●The problem that TPL companies worried about -- after alliance

Table 5-9 TPL companies worried (after alliance)

Not familiar the business of the company	Not suitable the information system	risk	Opposite from staff	Supplier can't do very well
8%	20%	18%	4%	16%

- Expecting for profit of alliance -- before alliance

Table 5-10 Expecting for profit of alliance (before alliance)

Quality	Service	Cost	Others
21%	32%	43%	4%

- Expecting for profit of alliance -- after alliance

Table 5-11 Expecting for profit of alliance (after alliance)

Quality	Service	Cost	Others
20%	47%	39%	4%

- Interests source

- Cost: labor cost 14%, invest 29%, integration 57%
- Service cost: lead time-38%, on time 53%, others 9%
- Quality - reducing of cargo damage 22%, information improvement 31%, information accuracy 47%

5.2.2 TPL companies in Europe

We can divide Europe TPL companies into four types.

- Integrated TPL companies. They can offer a wide range service. Including of making labels with different languages.

- Traditional TPL companies. At first they operate some small scale TPL business. These kinds of companies have their own assets, fleet, warehouse and customs declaration. The companies don't have high technique and their resource is limit. Finally they will merge to others are leave the market.

- New TPL companies. Excepting the cross regional TPL companies and some small regional TPL companies, there are a new kind of TPL companies emerging. Their common value added is speed distribution and increase turnover time.

- Some logistics department of national institution. For instance a national railway company.

5.2.3 Development of TPL in Europe

There are two motivations for TPL companies' development. One is the companies' demand for TPL; the other is TPL in Europe has high management level and cost

advantage. In Europe, to establish a distribution centre is quite expensive. So when companies open they want to outsource logistics.

In Europe, there are 955 distribution centers. 56% companies locate in Holland and 12% in Belgium. The alliance of Holland, Belgium and Luxemburg is the centre of Europe. It is convenient to go every parts of Europe. The establishment of regional distribution centre is good for TPL companies' business. Their develop trend is to be some cross- region companies.

5.3 TPL in Japan

5.3.1 Japanese TPL industry's forever target is optimization

Japanese logistics have 30 years history. It has three steps: the first step is from 1960s to 1980s. In this period, they focus on doing internal optimization. The second step is from 1980s to 1990s, they focus on optimize the whole TPL industry—supply chain management optimization. The third step is from 1997, they try to realize the optimization based on globalization, environmental protection.

5.3.2 Highly development of TPL in Japan

It is very common in distribution because Japan's economy is highly developed and its develop space is limit. TPL take 80% in the whole logistics market.

In Japan, freight companies engaged a little operation and they usually offer service for TPL companies. TPL companies' fleet are usually composed by their own vehicles and freight companies' vehicles. Transportation is very important in Japan's TPL industry.

5.4 The common trend for TPL in developed countries

- A. Outsourcing is the trend in business area
- B. Technique in TPL industry develops very fast and the ability of management improved a lot
- C. Professional TPL develop a lot, common distribution has been the main part.
- D. Their development target is intensive, collaborative and global.
- E. Electronic logistics has been demanded intensively and express develops a lot
- F. Environmental logistics will be the new trend

G. The education for TPL talent have completed

6 Comparative analysis between China and developed countries' TPL industry level

6.1 Comparison of China and developed countries in TPL industry

6.1.1 Comparison in TPL

- Comparison in TPL market scale

We have some data in 2001.

Table 6-1 TPL scale of China American and Japan

Country	TPL scale	The percentage of TPL in the whole logistics market
China	\$4900000000	2.1%
American	\$56000000000	5.1%
Japan	\$170000000000	80%

And another data is from Europe in 2000, the scale is \$ 3160000, the percentage is 24.4%.

From the data above, we know that Japan's TPL scale is very large while China's is too little. American's is just so on, but higher than China's and Europe's scale is large.

What is the reason that makes developed countries' TPL market scale is larger than China's?

Japan: The economy and distribution system is developed highly. The area of the country is small.

Europe: They develop TPL market firstly. During the process of being from separating to unification, industries want to reduce the cost of cross regional purchasing and distribution.

American: The area of the country is large. So it is difficult to develop distribution. Furthermore they relax the management in terms of air and shipping. The government didn't carry on too much support policy for TPL industry, so it leads the TPL scale in American is not large. But the increase speed is very high.

Comparing to developed countries' TPL, China's TPL's scale is too small. And the TPL companies are self- running usually.

- The comparison in terms of industry structure and performance

There are a huge number of TPL companies in China and their scale is small. The production differentiation level and performance is low. The structure is comparative structure.

In American, Japan and Europe, TPL companies are not too much. Their production differentiation is high and structure states in the process which is from monopoly to oligopoly. Meanwhile the profit, management technique and information level is much higher than China's.

6.1.2 The comparison between China and developed countries in terms of companies

Companies are the units which are composed TPL industry. Industry's development is based on companies' development. We compared the China's TPL companies and developed countries'.

In China, there are some characters in TPL companies.

- Companies' scale is small and the management is backward. Most of TPL companies came from storage and transportation companies. There are serious stripe- and- block partition. The integration ability is poor and intensive advantage is not manifest. So they can't realize scale benefit and the companies' profit is low.

- Information technique is backward. Network, bar code and EDI can't implement broadly, so it leads that TPL companies and client can't share information.

- Service is single. Most of TPL companies can only offer single and section logistics services. The main operation is storage and transportation. The value added service is not too much. They can't offer services which are relate to the whole supply chain.

- Service level is low. There are difference between logistics operation and clients' demand.

- The equipments of TPL companies are old, draggle and low standard.

- It is lack of TPL talents.

6.2 The reason that there is so long difference between China and developed countries

The reason is complex. TPL have developed in China for a short time. In fact TPL need long time to develop, but the industry profit ratio is not good for development of TPL companies quickly.

6.2.1 For demand party: the reason that companies don't want to outsource logistics

If the companies will outsource their logistics is a difficult problem, because on one hand, outsourcing could reduce cost, but on another hand, outsourcing could increase the worry about the uncertain.

There are three main reasons that companies would not like to outsource logistics.

- Companies could offer logistics service themselves
- Companies have no enough confidence for TPL companies
- It is lack of supper TPL companies

From above, we know that there are some problems on TPL companies themselves. TPL companies should do very well, demand companies will outsource their logistics pleasant.

6.2.2 The reason that cause the small scale, the low service level and performance of TPL companies

- TPL industries haven't developed for a long time in China. The management ability is poor, the technique is backward, the equipment is old and the standardization is low.
- Most of TPL companies in China are from traditional transportation and storage companies. They are poor at integration and the intensive management advantage is not manifest. The scale benefit can't realize and the profit of the companies is low.
- Most of TPL companies operate some single business. They don't do much value added business, so the production differentiation is not manifest. It leads the competition in terms of price is seriously, but the industry performance is reduced.

6.3 How to develop China's TPL

6.3.1 Rapid the property right system reform.

Most of Chinese TPL companies came from state- own storage, freight companies. They were born in planned economy and can't be suitable in international market competition. We should establish stock enterprise with share structure to realize separation of function.

6.3.2 Establish network point with the core of information technique

Information is the standard to estimate TPL companies. Companies could integrate operation flow and familiar the progress of clients' production and running. On one hand, companies could establish operation network point themselves if their companies' scale is large, on another hand, if they has seldom business, they can establish network point with other TPL companies.

6.3.3 Foster some cross regional international TPL companies and carry on intensive operation

Only if the TPL companies' scale is large enough, the economy strength is strong enough, they can be trusted by customers. When companies choose a TPL companies to outsource their logistics operation, the most important thing is the satisfaction ability for logistics and the quality of the service.

6.3.4 Doing much more value added service

According to the trend of logistics development, the TPL companies which own quite a lot of logistics equipment and complete network, meanwhile having design ability have the biggest development space. Only this kind of companies could offer one stop service. They can mix information technique and implement ability into whole. So Chinese TPL companies should do more value added services to enhance the dependency from big companies.

7 Compare china with developed countries on macro-management of third-party logistics

In this chapter, mainly through analysis of China and developed countries on logistic

of the macro-management, identify the third party logistics have a significant impact on the development of the management measures, then, analysis of China's storages, given proposals.

In this chapter, we want to mainly analyze Chinese and developed countries' TPL management on macro-management. We want to find out the efficient way which can impact TPL significantly. Then, we would like to analyze the defect of Chinese and try to give some suggestions.

7.1 Analyze the third part logistic of macro-management `s condition in china

The third party logistics theory came into china only more than 10 years, so third party logistics just develops only more than 10 years in china. China focuses on drawing up macro- management measure on short time. From the 90`s last century, Chinese government try to complete socialism market economy. Third party logistics companies become to be independent subject of market economy. The government adjusts their role which is from the direct controller to be a macro manager to the state owned enterprises. The third party logistics companies in China have some characteristics as follows.

7.1.1 Department and regions segment`s management system

In China's material circulation area, the Ministry of transport, Ministry of Foreign Trade and economic cooperation, state Post Office and the Civil Aviation Administration manage different aspects of transport, so it forms a fragmented management system. Therefore various departments are hard to cooperate and coordinate. Further more, each province is independent in terms of financial aspect. The economy and development plan are separately, too. Every part is isolate. The situation which is regional blockade and market segmentation impede the development of TPL industry. It is a major disease for the TPL industry.

The third party logistics operations are always some trans-regional, cross-sector services, but now a completed logistics process is divided into separate areas. It causes low efficiency of logistics. It conflict with the characters of third party logistics' cross-regional, cross-sector and network. It directly led to five results:

- The first one is it is hard to integrate logistic elements.
- The second one is it can impact the development of different types of logistics services based on multimodal transport.
- The third one is being lack of necessary coordination in making all kinds of infrastructure planning and construction.

- The fourth one is leading a large number of redundant construction and excessive competition.
- The last one is the waste of logistic resources.

This management system will lead to trade protectionism, unfair competition and impede third party logistics companies' merger.

7.1.2 Each section set active logistics policy

In tax policy, the domestic logistic companies have different problems in paying business tax and reducing value-added tax. The State Administration of Taxation decided to definite the relevant tax policy of the 37 companies which the National Development and Reform Commission and the State Administration of Taxation confirmed together from January 1st, 2006. In March 2006, the State Administration of Taxation issued a "The scope of pay tax' information and the problem about paying the tax". The notice clearly said logistic firms which have branch firms in the same province, autonomous regions and municipalities, the head firm operate those branch firms .And the cross-regional institutions do not have to pay local income tax. The document definite the logistics tax issues and solve some problems of duplication of tax.

In foreign capital policy aspect, in April 2006 the ministry of Commerce issued "The information which is about does better job on absorbing foreign capital in terms of logistics area". which applies to foreign investment laws and regulations, cooperation methods and other relevant laws.

In custom policy aspect, the General Administration of Customs in August 2006 decided to imply the inter-related areas "declaration in appendage, acceptance in port" the general administration of custom also issued adoption of method and the related provision. The purpose of this policy is to further suit the economic development, simplify custom procedures and improve custom efficiency.

In Statistics, in April 2006, the National Development and Reform Commission issued "The information about organize carrying on logistics statistics accounting report" which changed the logistics of social statistics trial system into formal accounting system. They decided to open regular statistical accounting of the logistics work. From then on the logistics of social statistics system was formally established.

In recent years the logistics department introduced a positive policy, but those policies are not clearly refined, not enough deep and perfect. Therefore the logistic enterprises can't use them effectively.

7.1.3 The government at all levels actively issued the Logistics Development Planning

According to WTO commitments, China's logistics industry in December of 2005 was not open to the concept of ostentation and the logistics market policy bulwark entered into a comprehensive rescinding, but in March of 2006, the Fourth Session of the Tenth National People's Congress adopted the "national economic and social development Outline of the Tenth Five-Year Plan ", the fourth canto" speed up the development of the service sector, "Chapter 16" developing the productive services inside, separately highlight one section:" vigorously develop modern logistics industry. This was the first time that status of the logistics industry was established in the national planning.

After China definitely put forward vigorously develops modern logistics industry in the future, governments at all levels actively developed the logistics development plan. Because there is a lack of national planning and arrangements as a whole ending up with limitation. According to incomplete statistics around the country, among the provinces issued by all levels of governments which have issued and accomplished modern logistics planning and study, there are nearly 30 economic centers cities which mainly lie in Pearl River Delta, Yangtze River Delta and other southeastern coastal cities with more developed economy such as "developing of modern logistics in Guangzhou City Planning," "Hangzhou, the development of modern logistics planning." In addition, in the north coast, logistics developing plans have been issued or established by the regional economic center and underdeveloped provinces and cities such as "Beijing's urban development planning logistics", "Jilin Province, the development of modern logistics planning," "The development of modern logistics planning in Guangxi", "Construction in Yunnan Province in Southeast Asia for modern logistics center development plan." and etc.

7.1.4 The logistic basic facilities are backward

At the end of 2006, the total national roads reach to 3,480,000 kilometers and the highway's distance has already arrived 4,540,000 kilometers. The railway has 7,660,000 kilometers. But comparing with developed countries', Chinese logistics facilities and technique level still fall behind them. Basic facilities of transportation's scales are small. According to land area and population density, Chinese transport network is only take 19.6% of American , 9% of German, 25% of India, 71% of Brazil. Those data explains China's is not only far behind the developed countries', but also is behind in developing countries'.

7.2 The macro- management for TPL in American

7.2.1 Development model of American's third party logistics- logistics mercerization model

American is the most complete country in market economy system. Government does not play a major role in the management. But companies request for obeying the marketization model. The rise of third party logistics is a good example of marketization operation. The third party logistics enterprises' service is not only storage and transport, but also need taking charge of distribution, inventory management and receipt inspection and so on, for they want to meet customers' satisfaction. The ratio of American companies' outsourcing logistics is very high, but the demand increase higher and higher.

American's third party logistics developed rapidly. It resulted by three reasons.

- First of all, it benefited from the government's supervision without undue intervention. It mainly relies on companies' independent market operation.
- Secondly, American benefited from the United States' perfect contract law system, then business enterprise and logistics service provider sign a cooperation contract, they do not have to worry about leaking out the commercial secrets. The business enterprises rely on logistics service provider to give them more space for developing third part logistics.
- Thirdly, it takes advantages from the United States' having different types of companies which have advanced technology and extensive distribution network, such as Ryder, Menlo, they have automated sorting system, electronic ordering system and so on.

7.2.2 Third party logistics industry's main macro-management measures in American

7.2.2.1 Complete law system

The United States is the unique country which practices a privatization on logistics resource, such as railway, transport, and warehouse, and so on in eastern capitalized country. The United States' logistics market is not only complex but is active. They are benefit from the perfect law system. The federal level system is composed by variety of commission. Interstate Commerce Commission is in charge of railway, highway and river transport to make them more efficient and correspond; federal shipping commission is responsible for interstate and across-ocean shipping; the federal energy commission in charge of interstate oil and gar pipelines, and the federal Constitutional court is responsible for interpretation, implementation, and

review of judgment of law and control of the commission's decision. The legislature enacts transport policy, control and authorized the establishment of institutions. They and some other state- level institutions composed the United States logistics market management system.

7.2.2.2 The macro-policy guide TPL actively

In the economy environment whose logistics developed highly. The Government continuously guides TPL through macro-policy to establish the strategic which aim to promoting economy through promoting modern logistics. There near sight and far sight are very clearly. The United States issued 'national transportation technology development strategy', whose major goal is establishing a safe, efficient and adequate reliable transport system. The scope is international, the form is integration, the characteristic is intelligent and the nature is friendly'. The long -term objective is adapting to economic growth and trade development requirement through establishing efficient and flexible transport system which can promote American's economic growth and ensure that the transport system accessible, efficient and flexible, etc. The short- term objective is to improve the transport system, promoting the national transport facilities, and so on.

7.2.2.3 Given more spaces to third party logistics - the most important policy measure for promoting American's third party logistics development in history

Carer Government began to relax regulation on the aviation industry, then the railway and highway regulation also was relaxed. American enacted new shipping law and relaxed shipping in 1984. So the United State has a nice business environment for logistics. Logistics professionals can have more spaces to design logistics cases. The logistics companies can focus on manage the supply chain; reducing logistics cost, and promote social logistics efficiently.

7.2.2.4 The new features of American's macro- management for TPL

Its features are strengthening environmental control and maintaining the community as a whole.

7.3 The macro-management for third party logistics in Japan

7.3.1 Japanese third party logistics development's model- Government guidance model

In Japanese logistics development process, the Government played a very important role. The mainly tasks are as follows: the first one is the planning have priorities. Considering about the actual situations that Japan has small land, limited domestic

resources and market, large quantity of import and export. They construct logistics base as planning in the suburbs in large and medium cities, ports, and major highway. At the same time they propose 'the optimal distribution system' around some certain standard, they collect the freight requirement which is different direction, quantity and time in order to practice mix distribution which can improve efficiency. Second, the Government increased capital investment and sped up the logistics base construction. Based on scientific plans, the Japanese Government in 1997 formulated 'integration logistics of frame work'. This policy showed that Japanese government provided powerful financial support on basic logistics facilities. Those facilities included railway, highway, airport, port, logistics base. For example, the biggest and latest integrated logistics distribution centre in Japan- Peace island distribution centre invests 57,200,000,000 yens. 70% of the investment is from centre Government finance, 20% is supported by place public finance in Tokyo, 10% from investment in enterprise. Third, Government enacts relevant policies to encourage the development of modern logistics industry. While for improvement of the road facilities, reformation of the intercity river conditions of transport, mitigation of traffic congestion and development of distribution and so on, the Japanese government introduced lots of policies: government relax controls, establishing government departments to promote coordination and providing government assistance to encourage third party logistics enterprise.

7.3.2 The main macro-management measures for TPL in Japan

7.3.2.1 Finance policy –predominating constructing basic logistics facilities

Japanese Government enacted logistics development policy. It focuses on perfecting and constructing logistics facilities. Japanese Government developed basic logistics facilities, just like highways network, railway network, port and airport, and so on in the whole country. This strategy was stimulated domestic demands of nation production and offering sufficient hardware for enlarging logistics market.

7.3.2.2 Give more spaces to third party logistics

Japanese Government embarked on a series policy revolution in order to improve the operation efficiency when they pay attention to establish basic facilities. Their target is to relax the regulation for logistics industry to make them develop actively and healthy.

7.3.2.3 “New integrative logistics policy” in 2001

The policy is argued a long time which is past by cabinet. The main development targets include three points in this policy.

First, to develop highly efficiency logistics which owns international competition ability and enhance international network points in order to meet the economy

globalization.

Second, it should control emissions and improve mode of transport conversion in logistics field in order to solve problems about global warming and air pollution.

Third, it should relax the regulation for logistics management and develop high value added logistics services to adapt to national ageing, diversification and electronic business development. It is necessary to relax logistics industry, solve traffic rash and offer people convenience life.

7.4 The macro- management for TPL in Europe

7.4.1 Europe's third party logistics development model-Government supervision and control, enterprises make their own decisions

Europe's TPL is in advanced area of the world as The United State. Comparing with the United State, their features are Government supervision and control, enterprises making their own decisions.

7.4.1.1 Basic logistics facilities –Government support, companies run.

Germany, for example, its distribution centre dedicated in enhancing economic and rationality of freight transportation and developing integrated transportation system. Germany distribution centre constructed following those principles: the federal government overall planning, the state government supports the construction, the enterprises making their own decisions. The specific contents are as follows

- The federal government does overall planning

The federal Government handles construction of main road and transportation hub fully. They investigate productivity distribution, logistics condition and convergence of various modes of transport in order to construct Logistics Park within the space layout, scale and the future development of land in nationwide. The state Government support to build Logistics Park for the unified state planning, others are not funded.

- State Government support construction

The state government provides the necessary land, roads, railways and other transport facilities to establish Logistics Park. The Logistics Park is rent by Logistics Company. The Logistics Company and Government invest joint-stock. Company elect their management Committee themselves. This Committee is on behalf of Company to deal with Government and other Logistics Park to communicate, but it

does not have administrative functions. At the same time the Committee takes charge of the construction of multi-service canters, maintenance plants, gas stations, wash stations and other public service facilities. They offer their member companies information, consulting, maintenance and other services.

●Enterprises make their own decisions

Assigned to enterprises make their own decisions, pay taxes according to regulations, based on their own operational needs of the corresponding Treasury building, yard, workshops, equipped with mechanical equipment and related auxiliary facilities. Cargo center of Bremen City as an example, Government do not establish any management organization take charge of tax except the German government is responsible for setting up of customs, import and export goods inspection. Management of cargo center adopts stock-holder form. The government invested 25 percent, company of the cargo center invested 75. Business companies elected committee and manger, in fact adopted a business “autonomy” means. Companies just need pay 380 German marks for the cargo center every month, furthermore they do not charge any fee. The functions of the Centre as a member of enterprises is mainly to provide information, consulting, maintenance and other services, representatives of 50 enterprises having contact with the Government and other cargo, not administrative functions. Provide a good public excellent facility and a service is the central purpose of the overall activities. So the center cargo constructs some integrative public like Plant maintenance, gas stations, wash stations, restaurants , some center cargo operate even a pilot training centre, those unit make own business by themselves. Good facilities, quality service, not only to enable the Centre has made significant social benefits, but also made great economic benefits. Tern on investment is 1:6, investment 203 million German marks, and the realization of the benefits to 12:15 in Bremen City.

7.4.1.2 Government in the role of logistics management- Supervision and control

Germany, for example, the German cargo management administer is the federal Bureau of Transportation freight (BAG). In Federal freight traffic law, the provision of the federal Bureau of Transportation freight task is supervision and control. In order to better supervise the functions of the federal goods ,official of Bureau of Transportation is not only in office but also in outdoor (roads, highways, stopping Yards) supervision, including shippers, transport companies or intermediaries

7.4.2 Europe third part logistics industry's main macro-management measures

- Finance policy- Government overall planning, state government support, enterprises make their own decisions model.
- Supervise and control logistics activities, Protection of transport safety.
- Uniform standards and coordinated development

For improving efficient of having contact with each country in Europe, they adopt a series of coordinated policies and measures to promote the standardization, universal sharing of the logistics system between Europe country.

7.5 Foreign governments in the role of the Logistics Development

Japan is the protagonist of logistics management in the transport, freight transport and warehousing, those apartments is managed by Agricultural Bureau. the Department of Transportation take more responsible for management ,custom manager import and outpost business , Federal Court for the transport control and the building of legal system in the United States. The development of logistics is by companies make own business, they do not have the unified management office. The Government has formulates a number of multimodal transport policy. There is no unified foreign logistics management of government departments, non-governmental organizations on the implementation of logistics management of the country: the United Kingdom and the United States, Japan, Singapore. Japan Institute of Logistics System, to assist the Government to manage, mainly survey programmer, the proposed move, data, training, academic exhibitions, lectures to enhance the exchange information. Nongovernmental organizations exchange logistics management information, such as warehousing, logistics management, and warehousing technology.

7.5.1 Foreign Government in the role of law and regulation

In foreign country, logistics enterprise is mail investor, they make own business on operation. The government uses various of policy and measure to encourage enterprise and limits construct logistic facilities, like cargo center. The government also not only improves logistics and city development but coordinate layout of city.

At policy and regulation, foreign countries do not have a unified logistics law, they use a relevant industry regulation. But they try to make new laws, actually information technical leads to law which adopts now can not adapt to logistics development. In Japan, Technical specifications, bar code has been referred to the issue of reunification agenda. Government's role reflects in policies and laws which is the relaxation logistics industry and promotion logistics law system.

7.5.2 Foreign government in the development of the distribution centre role

Many countries take measure to encourage the development distribution centre, distribution centre have a significant effect in regional economic development.

- Finance support

Belgium government investment in building distribution centers, a distribution center has provided about 17.5% -25% of the investment. France requested the all levels of local government funding distribution center building and logistics facilities.

- Implement tax relief policies

Some of the local government in France has taken first five years of tax free plan and given subsidies of 20,000 Francs per person in order to encourage the development of distribution centers. Belgium use tax relief policy to encourage foreign enterprises ' investments into distribution centers. Some of the local governments in Holland reduce the storage requirements of the construction planning and management and actively participate in the election of Distribution Center Site.

- Set up logistics parks and improve the economy of scale logistics industry

Japanese government set up of the logistics park in order to attract lots of distribution centers in this concentrate. Such as sharing facilities, reducing environmental protection costs and so on.

7.6 How to do macro-management of the third party logistics in China

We have introduced some management methods in developed countries above, there from we realize the rapid development of third party logistics take advantages from government pushes. American looses the third party logistics industry, then the third party logistics gets promotion .Japan achieves goals which focus on a native geography characteristic and improve distribution wide country, those goals create the third party logistics industry .Europe is aggressive to make plan for the high development of TLP and invest to construct logistic center. Currently, our country holds that it is necessary to develop TLP, Chinese government improves TLP as a major target from 2001 to 2005. We also realize the shortages in macro-management, such as the disadvantages in disciplines, management system, and basic asset. In order to promote the development of TLP, firstly, we need to reform macro-management shortages. Then, the government should draw up an aggressive policy, take measures effectively and suppose the development of TLP. In the following we will give some suggestions which may help government to manage TLP.

7.6.1 Improve our policies and regulations, reduce restrictions of TLP business enterprise on across province and industry, health promotion, and fair competition

Logistics industry can't go away from disciplines if it wants to healthily develop and compete fairly, of course, those policy and regulation is planned by china government. Logistics law and regulation of China have influence on old market system, it restrict to develop the third party logistics. So government at all level should be activity to take measure on development of logistics and clear not conducive to the development of the logistics of the laws and regulations, standardizing market.

- Breaking regional segmentation and industry segmentation and reducing the third party logistics enterprises to enter all regions and industry of the obstacles.
- According to foreign advance experience and condition of China make logistics policy, standard market, against transgressions, according to the law to protect the operator.

7.6.2 Government construction of infrastructure

Promotion basic facilities are a main role to develop the third party logistics, logistics need be supported by transport system and information exchange. But those basic facilities need large money and take long time to return on investment in order that one company can not afford this investment. So the construction of those basic facilities needs Government support. When those facilities have constructed, Government and company can use joint- stock system to manage, like Germen Government. The transport network is not high and uneven distribution, leading to the development of logistics industry in the regional imbalance in China. China's e-commerce infrastructure construction is obviously insufficient, inadequate development of facilities, low-speed network. Those situations restrict to develop logistics. Therefore, Government should play the role of manger, enhance investment on transport and information basic facilities, use of credit means to encourage and guide enterprises or individuals qualified to participate in infrastructure construction.

7.6.3 Government lead logistics centre construction, planning a national logistics system

A perfect network of logistics can not go away from the government's overall planning, and apposite restraint and control. At present, leading function of our government in logistics centre building is not enough, mainly the government-led logistics park construction, logistics of individual enterprises is also building a regional logistics centre. These government and enterprises can not coordinate on

benefit lead to influence on the operational efficiency of logistics. Due to the limited strength of companies, the size of a logistics center will not be great, redundant construction will be happen. We think the government need have a overall planning to construct logistics park, planning a national logistics system, identify main logistics hinge, leading or guiding logistics enterprises to construct a logistics centre, form an overall optimization of the national logistics system.

7.6.4 Establish logistics standards, standardized service logistics services, insure that logistics operations in rule-based

Logistics standard system construction is the basic qualification of Standardized and efficient Logistics, Construction of the system also completed by the government, which standing in position of justice, based on the healthy development of China's logistics industry. Government should construct the logistics industry as soon as possible with the common technical standards and logistics services standards, with the assistance of institutions and organizations. Continuously improve the facilities and logistics equipment based on unified standard, realize the rationalization and standardization of Logistics activities, insure that logistics operations in rule-based.

7.6.5 Government support, given more space to the logistics enterprise, and tax relief policy

China Federation of Logistics and Purchasing, executive vice president of junta ding said they were arguing with encourage to the policy of development of logistics. This show it is the end of redundant tax. This is the first published by the Central Government's support policy. Logistics industry is very special, its business need break up and outsourcing .therefore the redundant tax often happens. Development logic of Logistics enterprises is the full trust of cross-regional logistics network to enhance logistics efficiency and reduce logistics costs; however, the existing tax system casts a shadow for their growth. The new tax collection project point out, the operation of logistics business enterprises' business tax will be deducted to pay operating expenses after outsourcing the actual income, avoid redundant tax.

Following the introduction of this policy, logistics operator's access barriers will be cancelled and trade monopoly will be broken, the market will show the open pattern of fair competition

According to new policy, administration departments of Industry and Commerce provide convenience for logistics enterprises registered. In addition to national laws, regulations, the provisions of the State Council approval, the other pre-approval of all cancelled. At same time, the registration system of international cargo agents replaces the current examination and approval system gradually. And the logistics enterprise have non- juridical person branch companies do not need registration;

Governments should support, not to create obstacles.

7.6.6 The development of the logistics education, and train logistics personnel

According to the forecast, China's senior logistics management personnel demand for around 300,000 people from 2006 to 2010. Therefore, we must comprehensively train comprehensive logistics professional talent. In general, third-party logistics is inseparable from the strong support and guide of government. First, Compared to the past circulation system condition of decentralized horizontal, vertical focus, fragmentation, barriers to each other, overlapping construction, increase the internal friction,

The development of modern logistics industry is a third-party circulation system transform, In fact, equivalent to achieve a reasonable distribution of resources and advantages of restructuring. This kind of institutional change is bound to break up the old pattern of interest, difficult to promote the implementation without support of government. Secondly, the logistics infrastructure investment of logistics industry is a large-scale and returns slowly investment, low efficiency itself but high overall efficiency of project. Therefore, development of the logistics industry in all countries in the world, the Government is in a important position. On the one hand, in the early stages, the Government gives a set of preferential policies in land prices, tax and customs and so on.

Another is from the actual needs in the areas of macroeconomic policies; continue to support the development of the logistics industry to speed up the pace. Secondly, the government starts from the overall coordination of regional development planning. The development of modern logistics is also a system engineering which related to transportation, communication, storage facilities and other areas, with the lack of social environment, the logistics industry is difficult to in-depth development. Therefore, the special needs of the logistics industry can proceed from the overall situation of the whole logistics industry planning and coordination

8 Conclusions

The paper could be divided into two parts, one is the analyses of TPL in terms of SCP. Firstly we analyze Chinese TPL with SCP, then we compare it with developed countries and try to give some suggestion. Secondly, we analyze Chinese TPL with macro management view, then comparing with developed countries' and give some suggestion.

Inclusively speaking, Chinese TPL's scale is small, companies' scales are small, the services are single, service level is low and performance is low. We have encourages production companies outsourcing logistics, improve TPL service level and improve

the structure in order to improve the performance.

In the aspects of macro management, we should complete Chinese policy and law. Then government has leads to establish the basic logistics equipment and support TPL industry.

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