

The Emergence of Third Party Logistics

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Third party logistics (3PL), a new business model for physical distribution, originated in the U.K. and became highly popular in the U.S. in the 1990s. 3PL providers offer innovative alternatives to clients in the form of comprehensive logistics services. Because 3PL requires that providers have intimate access to the corporate strategy of their clients, relationships are based on long-term contracts as a rule.

The growing demand for 3PL can be attributed to both demand and supply side factors: (1) faced with deregulation and growing competition, transport companies are seeking new business opportunities; and (2) clients are seeking to outsource their logistics operations to cut costs and focus management resources on core businesses.

The 3PL business is making significant inroads in Japan. A growing number of companies have expressed intentions to use 3PL services, while transport companies are showing strong interest in the business. With further deregulation expected ahead, 3PL should grow as companies continue pursuing greater operating efficiency.

1. 3PL Defined

While the 3PL concept originated in the U.K., the term gained widespread recognition in the U.S. following a 1989 report by the Council of Logistics Management (CLM), and caught on as a business in the 1990s. Interest in Japan arose in the late 1990s, and 3PL was identified as a promising service to meet increasingly diversified and advanced distribution needs in a policy statement approved by the Cabinet called "Outline of Comprehensive Policies for Physical Distribution."

(1) Distinguishing Logistics and Physical Distribution

To explain the 3PL concept, we first need to distinguish logistics from physical distribution.

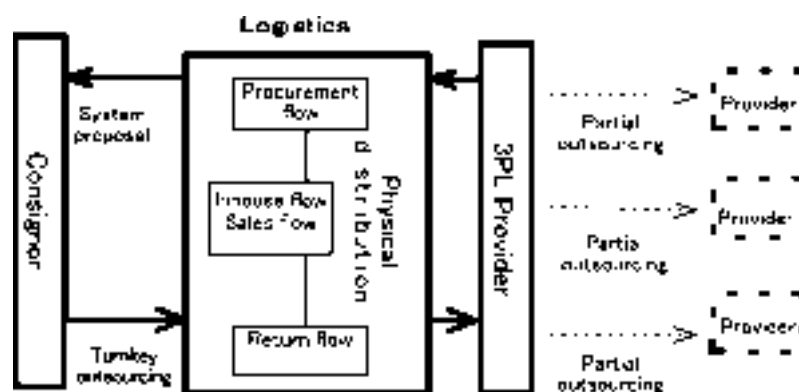
Physical distribution refers to the physical aspects of distribution, in which goods are physically moved from buyer to seller after a commercial transaction and transfer of ownership. Thus physical distribution involves sales distribution and the movement of goods associated with merchandise sales, to which is added inhouse distribution (production and sale of goods, along with receiving, storage, transport to distribution center or factory of purchased raw materials, parts, merchandise, and manufactured products).

Logistics includes not only physical distribution but the movement of all materials by a company, such as delivery of purchased raw materials, parts, and merchandise, as well as collection of returned products and waste. But the difference between logistics and physical distribution is not simply one of scope but of concept. Whereas the concept of physical distribution relates to the management and efficiency of a particular range of activity, logistics is a strategic concept for managing and pursuing efficiency of a comprehensive supply chain extending from raw material production to final consumption of products.¹ It covers all strategies and management areas including marketing, financing, research, personnel, and production planning.

(2) Definition and Scope of 3PL

In the "Outline of Comprehensive Policies for Physical Distribution," 3PL is defined as the "business of proposing physical distribution reforms to a client and undertaking comprehensive physical distribution services." However, it would be more appropriate to replace the term "physical distribution" with "logistics." That is, 3PL is where a provider is consigned by a client to perform comprehensive logistics operations, and cooperates with the client in optimizing these operations (Figure 1).

Figure 1 The 3PL Business Model



Source: NLI Research

3PL goes beyond transport and storage to designing a logistics network by determining warehouse locations and routing, performing inventory management and information management, and even proposing product lineups and personnel allocations.

The third party in 3PL refers to an entity other than the client and transport company. Originally, providers did not own physical distribution assets and conducted business by using transport companies. However, in practice some providers own their own physical distribution assets for trucking and warehousing.

Regardless of ownership of physical distribution assets, the primary requirement for 3PL providers is to have an expertise in logistics. Specifically, this includes: (1) the ability to manage all material handling needs of the client, including the optimal mix of means of transport and storage; (2) familiarity with the client's operations, and ability to improve the level of logistics service and cut logistics costs; and (3) ability to build the necessary information systems to support these functions. Since the client must share intimate details of its corporate strategy such as sales trends and production plans, 3PL is necessarily based on a long-term contractual relationship.

Separate from the form of 3PL that evolved in the West, Japan already has experience with integrated distribution and service providers. But their services have been greatly influenced by their objective of offering services that make use of their own facilities. On the other hand, the objective of 3PL providers is to improve the efficiency of their client's logistics system, for which external physical distribution assets may be used if warranted. Thus the choice of which physical distribution assets to use is based on efficiency and not ownership considerations.

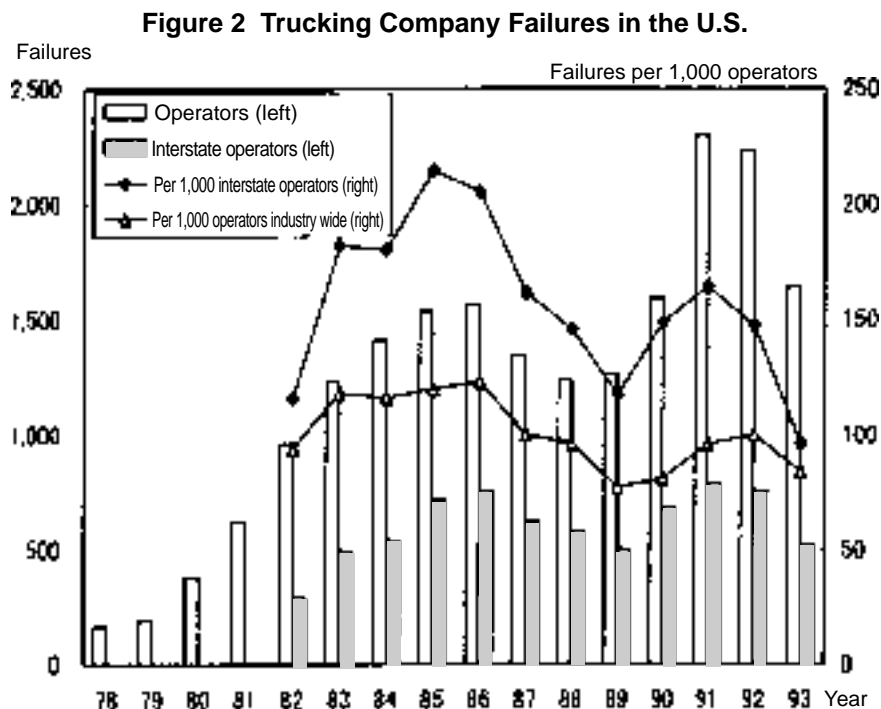
2. Development of 3PL in the U.S.

The development of 3PL in the U.S. occurred as a result of two factors that stimulated the outsourcing market for logistics services: (1) transport companies sought new business opportunities under deregulation and increased competition, and (2) clients sought to streamline operations by focusing on their core businesses.

(1) Deregulation and the Pursuit of New Business Opportunities

In the U.K., where 3PL originated, operating licenses were abolished in the trucking industry in 1970, followed later by liberalization of rates. The ensuing competition led companies to seek new opportunities in the 3PL business.

The popularity of 3PL in the U.S. during the 1990s was also preceded by deregulation and growing competition since the late 1970s. Deregulation of interstate trucking proceeded gradually following a court ruling in 1977, and was given a big boost by the enactment of the Motor Carriers Act of 1980.² This greatly reduced entry barriers, while the highly regulated rate structure became defunct in practice. As a result, the number of interstate trucking companies doubled from 1980 to 1986, and increased another 50 percent by 1993. Due to price competition, the number of interstate trucking companies that went bankrupt also surged, and from 1983 to 1991 the failure rate exceeded 1.5 times the overall industry (Figure 2).



Sources: Japan Trucking Association, *Current Status and Trends in the Trucking Industries of Europe and the U.S.-Regulations and Price Differentials*; and Japan Steel Federation Transportation Committee, *Second Survey of the U.S. Physical Distribution System*. Data is originally from Dun & Bradstreet, *Failure Data*.

(2) Growing Demand for Logistics Outsourcing

To overcome the low productivity growth of the 1970s and regain competitiveness by catching up in production technology, U.S. companies have strenuously pursued restructuring and reengineering since the 1980s. In other words, in reevaluating their overall situation, they have withdrawn from unprofitable businesses and focused their management resources on core businesses. In doing so, many companies have resorted to strategic outsourcing by turning to outside providers with logistics expertise.

This new demand for logistics outsourcing was an important factor in the development of the 3PL market.

3. The Growing Interest in 3PL in Japan

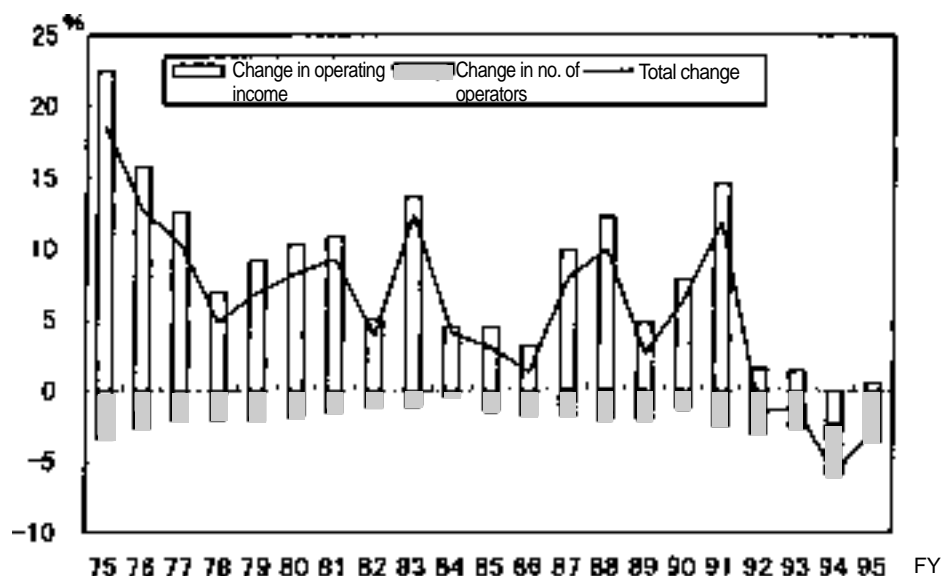
As with the U.S., interest in 3PL among Japanese companies has grown as a result of deregulation and new corporate strategies.

(1) Deregulation and Competition

Japan's transport industry is heavily regulated to ensure the status quo, and new entrants are approved by the Ministry of Transportation only if equilibrium in the transport services market can be maintained (while most regulations will be abolished in fiscal 2001, some areas will remain regulated in practical terms). Deregulation has already started in the trucking industry with enactment of the Trucking Business Law in December 1990, which abolished many regulations and replaced the regulated rate structure with a prior reporting requirement for rate changes. As a result the trucking industry is the most competitive in the transport sector.

Thus despite a slump in freight volume, the growth rate of trucking companies rose from 1.3 percent annually in fiscal 1990 to 4.3 percent in fiscal 1996. Meanwhile, rates have declined, as has transport efficiency. Rising competition amid the post-bubble recession has hurt operating income per company (Figure 3).

Figure 3 Factor Analysis of Average Operating Income in the Trucking Industry



Notes: Factor analysis was performed by taking the total differential of $O = E / J$, where O is operating income per operator, E is operating income for the industry, and J is the no. of operators. We thus have $dO / O = dE / E - dJ / J$, where the two right-hand terms represent the change due to operating income and to no. of operators, respectively.

Sources: Ministry of Transportation, *Summary of Land Transport Statistics*; *On the Number of Operators in the Trucking Industry*; *Physical Distribution Statistics*; and Ministry of Transportation Documents.

Moreover, with further deregulation expected, earnings should continue to decrease as more companies enter the competition. Given these conditions, companies are starting to show an interest in the 3PL business.

(2) Focus on Core Businesses

The prolonged post-bubble recession has also hurt earnings at client companies. As seen by the expansion of the outsourcing market in recent years, in addition to cutting costs, Japanese companies have begun focusing their resources on core business areas. With regard to logistics, rather than simply cutting costs by reviewing each operation, companies are starting to turn to outside providers with logistics expertise to revamp their entire logistics system. While most are foreign companies and fast-growing ventures, the demand for 3PL is expected to spread.

4. Benefits and Faults of 3PL

3PL offers advantages and disadvantages to clients as well as providers. Below we briefly describe each of these (Table 1).

(1) 3PL Providers

1. Higher Earnings

With respect to physical distribution, distributors can increase their earnings by expanding the scope of operation, increasing the proportion of cargo handling of clients, and adding new clients. Non-distributors can also expand business opportunities by moving into the logistics business. Besides earnings growth, distributors can pursue cost-efficiency through turnkey contracting of logistics operations. By undertaking numerous consignments, logistics expertise can be accumulated to deal with a variety of conditions. Moreover, information sharing and dependence nurture trust with clients, leading to long-lasting business relationships and hence income stability. The long time frame necessary for consignment and contracting enables providers to choose clients based on financial stability and growth prospects.

2. Risk in recovering expenses

The length of time until the contract represents a disadvantage in terms of cost. The period is prolonged by the need to understand the details of the client's operations, and often by a competitive selection process in several phases which providers must go through to win contracts. If a provider fails to be selected, the substantial expenses incurred in the process become unrecoverable.

Also, a substantial initial investment is needed for information systems, which are vital in the 3PL business. Even after winning a contract, the provider must continually update the system proposals to stay up to date with changes in the client's transaction format. Moreover, because of the turnkey contract, the provider risks losing a huge amount of business if the client decides to switch to a different provider.

Since systems design and consulting require a staff with high expertise, personnel policies must be flexible and not be premised on lifetime employment and seniority practices.

(2) Clients

1. Cost reduction and focus on core business

For clients, the greatest advantages of logistics outsourcing are cost reduction and the ability to focus management resources on core business areas. Cost reduction derives from tapping the expertise of the 3PL provider to optimize the distribution network and other logistics. This optimization shortens the lead time between orders and delivery, reduces storage space needs and locations, thereby allowing inventories to be reduced. In addition, information management is improved to provide a clear grasp of costs and transport status.

Turnkey logistics contracting enables the client not only to focus on its core business, but to use few distributors, thereby simplifying transactions, correspondence, payment, and paperwork. Furthermore, the investment needed for logistics is reduced.

2. Loss of expertise

A disadvantage of 3PL is the risk that turnkey logistics contracting tends to make the logistics operations a black box, or at least prevent the client from accumulating logistics expertise. Moreover, since the 3PL provider has access to the client's vital strategic information, there is always the risk of a breach of security. In personnel management, any workers made redundant by outsourcing cannot be laid off as in the U.S., but must be provided new jobs.

Table 1 3PL Merits and Faults

	Merits	Faults
For 3PL provider	<ul style="list-style-type: none"> • Ability to grow income through new operations, volume growth, and new contracts. • More efficient logistics through turnkey contracting and management. • Stable income from long-term contracts. • Accumulation of logistical expertise. • Relationship of trust with consignor. • Ease of selecting consignor due to long period needed to finalize contract. 	<ul style="list-style-type: none"> • Requires long period to finalize contract after initial approach. • Cannot recover massive expenses if proposal fails to result in contract. • Requires large initial investment in information, etc. • Requires system proposals that match changing transaction types of consignor. • Loss of entire consigned business in case of loss of business. • Staff of experts requires flexible management.
For consignor	<ul style="list-style-type: none"> • Cost reduction through more efficient logistical operations. • Ability to focus management resources on core business areas. • Reduced lead time between orders and deliveries. • Reduction in inventory and storage space needs. • Firm grasp of costs and transport conditions. • Simplified transactions due to fewer distributors. • Smaller investment needed in logistical operations. 	<ul style="list-style-type: none"> • Generates redundant workers, who must be given new jobs. • Logistical operation tends to become a "black box." • Cannot accumulate logistical expertise inhouse. • Increased risk of information leakages regarding corporate strategy.

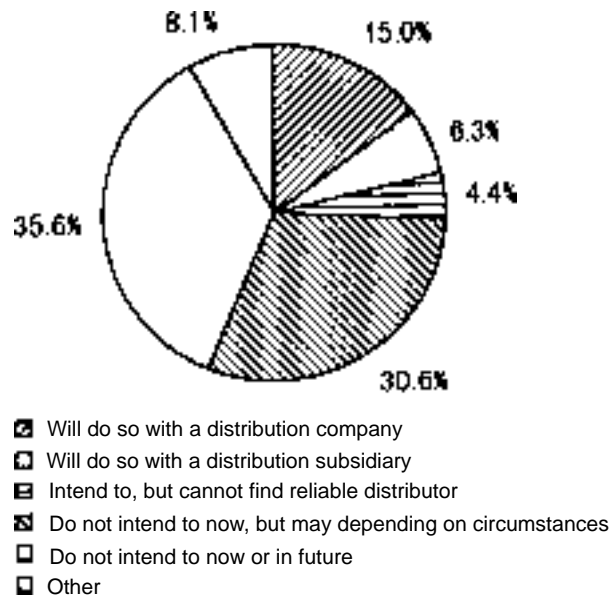
Sources: Compiled from Transport Economics Newspaper, *Third Party Logistics-The Global Distribution Reformers*; Kohya Kikuchi, *Introduction to State of the Art Logistics* (revised edition).

5. Future Prospects

The 3PL business has already made significant inroads in Japan among trucking and warehousing companies, trading companies, and new 3PL providers. In addition, consulting companies and construction companies are offering services in physical distribution similar to 3PL.

According to a Japan Trucking Association survey, 12.3 percent of the clients (among 187 respondents) of trucking companies outsource their entire physical distribution operations. Moreover, when asked their future intentions (among 160 respondents), 21.3 percent said they intend to outsource these operations, while another 35 percent may do so if they find a reliable provider or if circumstances change (Figure 4).

Figure 4 Consignor Intentions Regarding Turnkey Distribution Contracts



Source: Japan Trucking Association, *Survey of Trucking Companies Engaged in Outsourcing and Third Party Logistics Regarding Their Preferred Approach Toward Consignors*.

Meanwhile, 77 percent of trucking companies (among 534 respondents) either already have or intend to be providers of turnkey physical distribution services.

Based on these survey results of intentions and status of the 3PL business, further deregulation of the transport industry, and need for continual efficiency improvements among companies facing global competition, we expect Japan's 3PL business to develop further.

Notes

1. The CLM defines logistics as the process of designing, implementing, and controlling the flow and storage of raw materials, semi-finished and finished products, as well as relevant information, from production site to consumption site in a way that optimizes cost-effectiveness and satisfies customer requirements. The term logistics originated in the military and refers to the maintenance of lines of supply and communications between forward areas and support areas.
2. The U.S. trucking industry consists of intrastate trucking companies, who are regulated by the state, and interstate trucking companies, who are regulated by the Interstate Commerce Commission.