Organizational Transaction and Access to the Japanese Import Market

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1. Introduction

There has been an increasing amount of criticism about the difficulty of obtaining access to the Japanese import market. Imports of such products as steel and paper, which should increase quickly when the exchange rate of yen appreciates, actually increase only gradually. There seems to be a strong linkage between the domestic suppliers of these products and their users, which makes it difficult for foreign products to penetrate into the market.

For the distribution of consumer goods, we can observe similar longterm transaction relations in every level of the distribution network, and it again seems to be quite difficult for new entrants, especially for foreigners to reach the Japanese consumers. Some people rush to the conclusion that the barriers due to the structure of the distribution market and to the business practices there have basically the same effects as such formal trade barriers as tariffs and quotas. This is one of the most important trade issues for Japan, whose formal trade barriers are now the lowest in the world as far as manufactured goods are concerned.(#1)

The issue of market access to the Japanese import market is quite complicated, and it cannot be dealt with in the same way as the formal trade barriers. There are at least three economic problems that researchers must give some answers for before they make any conclusive statements about the issue.

The first problem involves grasping the realities of the Japanese distribution system. Most of the criticism directed at the Japanese distribution system is based on anecdotes; comprehensive analyses of the Japanese distribution system have been rarely undertaken. If one looks at the data on the Japanese distribution system carefully, it will prove difficult to conclude whether the system is efficient or not. One can find many unfamiliar and complicated business practices in the Japanese market, but there is also some evidence that the system is working quite efficiently. As far as I know, no comprehensive research exists about the Japanese distribution system that can be used for considering the issue.

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The second problem is that there is no proper understanding of the economic mechanism underlying the Japanese distribution system. There is a tendency to consider Japanese-style business practices, which are quite peculiar, as either outdated or a product of stringent government regulations. It cannot be denied that these can be found in the Japanese distribution system. However, it is at the same time quite difficult to imagine that such inefficiency and lack of competitiveness can continue in

the Japanese distribution system. where there are many entries and exits and severe competition among firms.

The following statement by R.H.Coase is interesting in relation to the above point:

One important result of this preoccupation with the monopoly problem is that if an economist finds something — a business practice of one sort or other— that he does not understand, he looks for a monopoly explanation...What people do not normally do is inquire whether it may not be the case that the practice in question is a necessary element in bringing about a competitive situation. [p.67-68]

What Coase says applies to the Japanese distribution system. There should be some economic reason for the particular structure of the distribution system and the business practices there given that they have survived for such a long time. I believe that the problems of imperfect information, uncertainty are the keys for understanding the economic mechanism behind the distribution system.

A large-scale distribution system would not survive if there were not for serious problems of imperfect information and uncertainty. In that case the manufacturers would simply take orders from customers and have the freight companies deliver the goods to the customers. This kind of simple distribution system does not work well in the real world, and there are reasons for the emergence of a large-scale, and complicated distribution system.

The development of economics of imperfect information, game theory and related fields offers useful perspectives for the above viewpoint. According to these theories, particular market structures such as vertical integration (Williamson) or particular business practices such as credit rationing (Stiglitz and Weiss) emerge to overcome distortion caused by

imperfect information or uncertainty. These theories provide valuable frameworks for analyzing the financial market, the behavior of firms, industrial organization and the labor market. I believe that the distribution market can be analyzed in a similar way.

The third problem we face is the evaluation from the perspective of international trade of the nontariff barriers that have originated in the distribution system and business practices. It is certainly true that these barriers cannot be dealt with in the same way as formal barriers such as tariffs and quotas; the former emerges from the economy, while the latter is imposed from the outside. So far, no rigorous theory is available to examine the welfare implication of such endogenous trade barriers.

As we have seen above, there are many difficult questions that researchers must give answers to before they make any conclusive statements about the market access issue. It is impossible to deal with all these issues here. I will concentrate on the second issue, that is, the economic mechanism behind the Japanese distribution system and the business practices there. By focusing on this issue, I may be able to provide some insights into the other two issues.

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Even the second issue has many important aspects. What I will emphasize in this paper is the aspect of long-term business relations that I call "organizational transaction". I believe that this aspect is one of the keys for understanding the workings of the Japanese distribution system.

The structure of the rest of the paper is as follows. In Section 2, I give a rough overview of the Japanese distribution system; in Section 3, I discuss the nature of "organizational transaction"; and in Section 4, some further remarks will be made.

2. Japanese Distribution System and Business Practices There

Table 1 provides a comparison of some of the characteristics of the Japanese distribution system with those of other Western countries. This table indicates that the Japanese distribution market is characterized by the existence of many small-scale firms both at the wholesale and the retail levels. Japan has a larger number of shops per a given amount of population number and a smaller number of workers in each shop than other Western countries.

[Table 1 around here]

Table 2 shows the share distribution of retailers in various countries. It indicates that the share of large-scale retailers in Japan is quite small and that there are a large number of small-scale retailers, which are called "papa mama stores" (shops run solely by family members).

[Table 2 around here]

We can think of various factors which explain the dominance of small-scale firms in the Japanese distribution system. It is often pointed out that the governmental regulations which protect small-scale firms are responsible for their dominance. Among the various regulation measures of particular importance is the tax preferential treatment for small-scaled firms, "The Big Store Act", which regulates the establishment of new stores by big retailers and the license system for such products as cigarettes and liquor.

Although these government regulation have considerable impacts on the structure of the Japanese distribution system, they are not the only factors responsible for the particular structure of the Japanese distribution

TABLE 1

Compasison of Distribution Manheds among Major Gautines

		Retailers	ilers				Nhol	Wholesalers	•			8/17	
		Shop der	density	**************************************	# of workers	doys	op density	d.		# of workers	Jorkers		Tatio.
Countries		7	sdoys to #		per shop		# of shops		# of wholesalors	dous and	4.		
	Year	lose Km2	population of lo,000	Year		year	1000 Km	population of	re-failers year	year	•	Year	
To Back	25	A 3.1.	135	500	3.9	20	1,043	34	2.54	8r 9.7	9.7	400	4,4
2 6 6	85.3		69	85.3	\$ 50	85.3 4.8 86.3	202	12	309	85.3 7.0	0,7	40	1, 8
A O C	200	200	1-8	22	82 7.5 82	22		91	961	62	12.6 82	82	1.9
FRANCE	100		102	83	3.9 86.1	66.1	2.90	29	285	٤٤	9.9	n 60	1.6
N	70	1406	19	84	8.9	1	1	1	1	j	1	١	,

"Retailing Business Monitor", "Statistical Abstract" "Causus of Business" Anuaire Statistique de la Fronce " Statistisses Jahrbush " Source : White Paper on International Track and Industry DATA :

"Commercial Statistics of MITI"

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TABLE 2 Size Distribution of Retailers in Major Countries

	I		1		}
	year	Japan	France	υk	USA
	/				
	1976	24.9	%	56.7	0/0
Share of			30.0	57.8	51,4
Large Scal Retailers	1977			59.0	3
(share in terms of	1948			2 1, 0	
(the amount of sales)	1979	27.9	31.1		
			,		
The Share of the					
number of Small-		61.1	63.7	_	43.6
Scale Redoilers		(-1979)	(1980)		(1977)
of the number of					
shops)					
The Share of					
He number of very		F10	41.5		
small-scale retailers		5 6.4			
(shops run by		(1979)	(1980)		
family member alone			1		!
(share in terms of					
the number of shaps	1				

Source: Tamura

in references

system. In fact, I believe that the factor explained in the rest of the paper is much more important for the emergence of the particular distribution system in Japan.

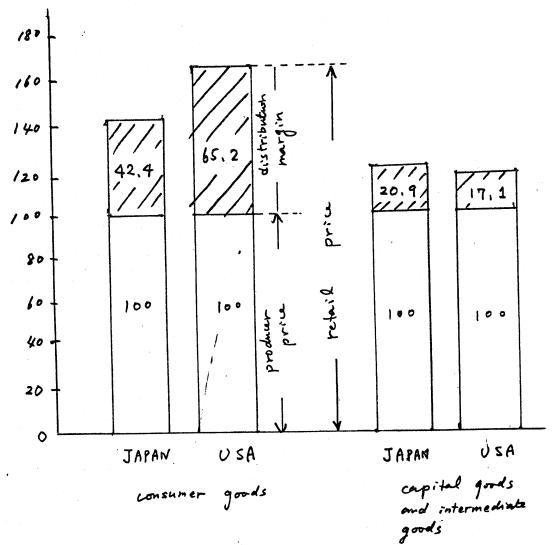
If the government regulations are the most important factor determining the structure of the Japanese distribution system, the Japanese distribution system should be quite inefficient, since the system is distorted by government intervention. However, some data suggests that the performance of the Japanese distribution market is not as bad as expected. Figure 1 provides a comparison between Japan and the United States of the distribution margin for both consumption goods and capital goods. The distribution margin is one of the indices which measures the efficiency of the distribution market. From the figure, we can see that the margin is actually lower in Japan for consumer goods and not much higher for capital goods in Japan compared to the corresponding number in the United States.

[Figure 1 around here]

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The dominance of small or medium-sized firms is not characteristic of the distribution market alone; they even dominate the manufacturing sector. It is again possible to explain the dominance of small or medium-sized firms by the government's preferential policy. However, as far as the manufacturing sector is concerned, the dominance of small and medium-sized firms is usually said to be the source of the competitiveness of the Japanese economy, especially of the machinery industries. The efficiency of the sub-contracting system in the motor vehicle industry is one typical example: the system is sustained by many small and medium-sized firms.

Roughly speaking, one of the essential characteristics of the Japanese manufacturing sector is the network of big and small firms wherein there are various types of cooperative exchange such as informational exchange, the



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Source: While Paper on International Trade and Industry (1988): MITI, JAPAN.

DATA: "Survey of Current Business".
"Input-Output Table "MITI.

supply of tools and parts on a long-term transaction basis, and the exchange of technology. This contrasts to the system where the industry is integrated into a set of large firms and where the informational and technological exchange is conducted basically inside each firm. If the decentralized organization of the Japanese manufacturers with small firms playing an important role is in fact efficient, the dominance of small or medium-sized firms will remain unchanged even if the government discontinues its present policies favoring small or medium-sized firms.

A similar argument can be made for the Japanese distribution system. As long as a cooperative exchange of goods, services and information is possible among firms, the decentralized system where many small firms are involved will actually still be quite efficient. It may be even more efficient than a centralized system where there are only a few large-scale and integrated distributors. The key element here is wheter it is possible to organize a cooperative exchange of goods, services and information among firms. This is the central topic of this paper, and it is dealt with in Section 3.

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Another important characteristic of the Japanese distribution market is that goods go through many layers of wholesalers, referred to as the multi-layer structure of the Japanese distribution market. One of the methods used to confirm the multi-layer structure is to check the w/r ratio: the ratio of the amount of wholesale transactions over retail transaction. The higher the ratio is, the more wholesalers there are who are involved in the transaction of commodities. The last column of Figure 1 shows a comparison of this w/r ratio among various countries. The ratio is distinctively high for Japan.

Although there are some difficulties in using the w/r ratio as an index of multi-layer structure (#2), some other methods of checking the multi-layer property of the Japanese distribution system also support this characteristic of the Japanese distribution system. (#3) Of course, I do not mean that the entire distribution system has this multi-layer property. Distribution markets for some goods have a much simpler structure, but there are more goods whose distribution markets have a multi-layer structure in Japan than in any other developed countries. In fact, the distribution structure of some goods is very simple: wholesalers do not play any important role and there is direct link between manufacturers and consumers. The macro data on the w/r ratio indicates just the relative importance of the multi-layer property in the Japanese distribution system.

The multi-layer structure of wholesalers is closely related to the fact that the distribution system consists of many small retalers. If the Japanese distribution system is a decentralized one as mentioned before, the role played by wholesalers must be quite important. One might think that the more wholesalers there are involved between the manufactures and the consumers, the less efficient will be the distribution system. (#4) However, the macro data as in Figure 1 does not support this idea: multi-layer property does not imply inefficiency.

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In order to understand the role played by wholesalers in the Japanese distribution market, it might be useful to consider a particular example: the two types depicted in Figure 2 illustrate the two typical structure of the distribution system of apparel in Japan. The example also indicates that the Japanese distribution market actually contains various kinds of distribution structures, where the multi-layer property of wholesalers can

be observed only in a part of it. Note that the following classification is very much simplified for the convenience of discussion.

[Figure 2 around here]

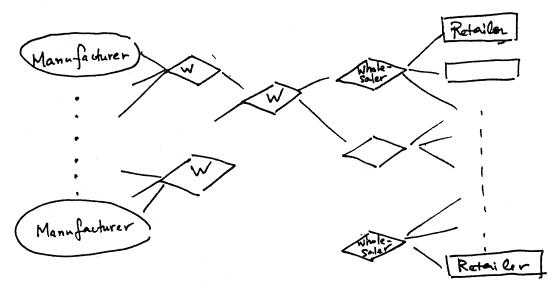
Type 1 in the figure illustrates the situation where wholesalers do not play any important role. Perhaps I should not exaggerate the lack of wholesalers for type 1. There are often some wholesalers between retailers and manufacturers. In this case retailers just purchase commodities from wholesalers or manufacturers. (The manufactures here should be given a broad interpretation. In Japan, where there are many small-scale manufacturers, wholesalers sometimes play the role of production coordinator by taking orders from retailers, giving market information and providing the design of products to manufacturers. We include this type of wholesalers in with the manufacturers.) The transaction relation between the manufacturers (wholesalers) and retailers in this type is basically a simple market one. Exchange is conducted on the basis of an explicit contract. Risk of dead stocks is covered by retailers.

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A typical example of a retailer using type 1 distribution system are large-scale nationalwide supermarket chains. These supermarkets have hundreds of branches all around the country and can enjoy economies of scale. By scale economies, I not only mean risk management based on the law of large numbers but also such activity as the collection of market information and the development of new commodities. These retailers often ask manufacturers to supply customized products according to specifications made by the retailers. When the manufacturers in this procurement process are foreigners, it is called kaihatsu Yunyu (development import), which means the import of goods from the rest of the world according to the specifications of retailers. The importance of kaihatsu yunyu has become

Type I

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Type II

Figure 2. Two types of Distribution system of Apparel

9- A.

greater in recent years. According to The White Paper on International Trade and Industry of 1988, this type of import counts for about 20 % of procurement of Japanese retailers from the rest of the world, while it counted for slightly less than 7 % in 1983. It is important to realize that both the wholesalers and retailers may play quite an important role in Japan's future import of manufactured goods.

Some medium-sized chain stores which specialize in particular types of apparel also take the distribution structure as type 1. These chain stores focus on certain types of customers and do not rely much on wholesalers for procurement or information collection. They are also quite active for kaihatsu yunyu.

Let us now turn to the distribution structure of type 2. In this type wholesalers play a much more important role than in type. A typical example of retailers which take this type of distribution system are department stores. Small-scale retailers in each local shopping area also depend on this type of distribution system. The relation between retailers and whosalers in this distribution system differs considerably from the relation between retailers and manufacturers in the type 1 distribution system. For the former we more often observe business practices as herpin-sei (the practice whereby unsold goods are returned to wholesalers), the "rebate system" (which is basically a non-linear system under which incentives are given to the retailers who sell a large amount) and "contract renegotiation" under which the condition of the original contract is renegotiated and changed retroactively to a previous period so that manufacturers, wholesalers and retailers can share risk.

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Wholesalers play an active role for the sales of apparel in the department stores. They play an active role in such activities as pricing

and the arrangement of commodities. In one sense the department stores provide only the place and shop clerks (but not all of them, and some are in fact provided by wholesalers and manufacturers) to the wholesalers, and wholesalers sell their products. (#5) Thus, the risk of dead stock is covered by wholesalers. The role retailers play in the type 2 distribution system is much more limited than that played by retailers in the type 1 system. The gap is filled up by wholesalers.

The type 2 system has its own rationality. A wholesaler, which makes transactions with many retailers in various regions, can enjoy scale economies for such activities as information collection and risk management. For small-scale local shops it is impossible cover the risk of dead stock, and to collect information about market trends and the availability of products. The trends of fashion in some apparel change quite frequently and rapidly. Wholesalers have a comparative advantage for such activities. Even for department stores which sell such a large variety of goods at only a limited location, it is far better to use the resources of wholesalers. Only the large-scale supermarket chains which have hundreds of branches and which sell mostly standardized goods do not need to depend on wholesalers very much. As mentioned before, there are a large number of small-scale shops in Japan, and this factor induced the development of the type 2 distribution system in various fields.

Both type 1 and type 2 systems have some rationality, and it is impossible to make any general statement on which is the more efficient. The answer to that question depends on many elements, among which the type of goods transacted in the market is one of the most important elements. The type 1 system might be more efficient for standardized goods whose sales are quite stable. For these goods, commodity information collection

about market and inventory management at the level of wholesalers are not important. Examples of these are cheap cameras, films, and ordinary electrical appliances such as radio cassette tape recorders and TV sets.

On the other hand, the type 2 system may be more efficient for certain kinds of apparel for which the element of fashion is an important factor. The system is also appropriate for certain commodities for which services attached to the commodities are important for customers. The distribution system of books, which is quite controversial since it is based on a typical structure of the type 2 system, may be a good example of this. In the case of books the taking of orders is an imortant service for customers, and the coordination ability of wholesalers contributes significantly to a quick delivery service of ordered books, although it is often claimed that the cost of distribution under the system forces consumers to pay higher prices.

Another important element when one compares the relative efficiency of the two system is the market vs. hierarchy issue for efficient allocation of resources. For the type 1 distribution system, efficient allocation inside big firms becomes a vital element. In the case of the type 2 system, it is important for manufacturers, wholesalers and retailers to behave cooperatively and to have good coordination. It is well known that coordination and cooperation are not easy task to carry out with the presence of imperfect information.

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The former issue, that is, resource allocation inside a firm, is far beyond the scope of this paper. However, the second issue, that is, the coordination and cooperation of firms in the decentralized distribution system, is essential for the understanding of the economic mechanism behind the business practices in the Japanese distribution system. We consider the issue in the next section.

3. Organizational Transaction: One Aspect of Japanese-Style Business Relations(#6)

3-1. Transactions of unstandardized commodities

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The long-term transaction relation is commonly observed in Japan in various places such as between firms, between retailers and customers, and between workers and managers. This kind of long-term transaction relation, which I call organizational transaction in this paper, is a key for an understanding of the Japanese distribution system.

As have explained in the previous section, it is vital for a proper functioning of the decentralized distribution system that good communication, coordination and cooperation exist among fims in the distribution market. In this sense, there exist a variety of externalities among the firms in distribution markets. This is the world which the theory of agency relation or the game theory treats.

This kind of world is quite different from one which the theory of pure market exchange deals with. In the world of pure market exchange, the quality of the product transacted is given, and both the seller and the buyer know about the quality equally. In this situation a simple market transaction is possible. The economic individuals who are willing to supply the good at lower prices become sellers, and the individuals who are willing to spend more money on this good become buyers. (In the case of international trade, the theory of comparative advantage explains this relation.) The only relevant variable for the transaction is the price of the commodity in this pure market exchange. The commodities transacted in

this way are basically quite "standardized". In fact, standardization is an important step in making market exchange possible.

However, in the real world, there are many commodities transacted which are far from being standardized. There are many elements which make commodities transacted unstandardized. It may be easier to understand this point by considering more concrete cases.

Let us first consider the transaction relation between retailers and customers. If we takes account of various services accompaning the sales of commodities. the commodity exchanged between retailers and customers are quite unstandardized in many cases. A typical example of this is a of complicated home electrical appliances such as air transaction conditioners. The utility which customers feel from the consumption of the goods depends to a great extent on the level of services the retailer These services include quick and approriate repair and provides. maintenance services, and the provision of appropriate information. It is of course theoretically possible that these services are provided by firms specializing in repair. If that is the case, what is treated by retailers is just the commodity, and it is in fact a quite standardized commodity. But, in reality, most repair and other services are provided by retailers selling the products in Japan. Thus, the consumers expect many things of the retailers and the transaction relation is not a simple pure market transaction.

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The transaction relations between manufacturers and wholesalers and between wholesalers and retailers move farther away from pure market transactions. As discussed in the previous section, retailers depend heavily on wholesalers for such things as the collection of information about market trends and the availability of products, financial services,

and quick and small-lot delivery services. In that sense what retailers buy from wholesalers is far from being standardized. A somewhat similar argument can be made for the relation between manufacturers and wholesalers.

transaction relation of intermediate goods is also quite The complicated. One typical example of this is in the transaction of automobile parts. The so-called subcontracting system can be observed for this commodity in Japan. Why has the subcontracting system emerged for the transaction of automobile parts? One answer to this is that what is transacted between parts producers and assemblers is quite unstandardized. Many automobile parts do not lend themselves very well to provosion by simple market transactions. In order to provide the assembling firms with the necessary products the parts makers will probably have to make a specific investment which cannot be easily applied to other uses (#7). In addition, an effective coordination of production between the assembling firm and the part makers is extremely important. Therefore, both sides must share information with each other. And coordination is not simply a matter of making adjustments regarding production schedules; even more importantly, it also includes making changes in the parts themselves by creating new products and improving old ones.

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It would be very difficult to carry out this type of transaction through a market transaction based on an explicit contract. As pointed out by Williamson, it would be nearly impossible to draw up and agree on a contract that would cover any and all future contingencies, and it would be even more impossible to implement such a contract successfully. Therefore, transactions will be based on implicit agreement, which takes the form of the subcontracting system.

The transaction relation of the kind for automobile parts can be observed in other intermediate goods in weaker forms. As will be discussed below, even a product like paper, which seems to be a typical standardized goods, has a similar transaction relation to that for automobile parts.

There are limits to market transactions for unstandardized goods and services. The development of information economics and game theory in recent years offers useful perspectives in understanding why a desirable allocation of resources cannot be achieved by simple market transactions for unstandardized goods and services. Let us summarize briefly what kind of market failure arises.

Market failure due to informational asymmetry between sellers and buyers that exists before contracts are made is called "adverse selection". There have been many studies undertaken on adverse selection, the most famous one being on the market for lemons by Akerlof. The adverse selection problem is quite important for the analysis of distribution markets in which there are varieties of informational asymmetry about the quality of products, services and firms.

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Even if there is not any informational asymmetry when contracts are made, the market can still fail if the action of one of the transacting parties affects the other. Moral hazard is a typical example of this. The theory of agency relation discusses what kind of contractural arrangement can mitigate this moral hazard problem. External effects of this kind is often two directional. It is the subject of the game theory to consider how cooperative transaction relation can be constructed under this two directional externalities.

Informational imperfection plays an important role in the above problem of externalities. If information is perfect so that the behavior of each

individual in the contract can be monitored by other individuals ex post, the contract can be arranged so that each of the contracting parties is forced to behave cooperatively.

There are three reasons why such contracts that force each individual to behave appropriately cannot be made. One reason is that it is simply impossible for one party to observe the behavior of the other. Secondly, when the contract must be a long-term one due to some technical reason, it is impossible to conceive all possible future contingencies when making contracts. Thirdly, even if there is no informational imperfection for the economic agents involved in the transaction, it may be difficult for the third party such as the court or the government to access the private information of the parties involved in the transaction. In this case, it is difficult to implement the contract, because there is an incentive for cheating and it is impossible to punish this cheating by the power of the court or the government.

There are at least two ways to overcome the externality problem due to informational imperfection. One is to integrate the market and to allocate goods and services inside a firm. The type 1 system of distribution in which large-scale integrated retailers play a central role is an example of this solution. What we discuss below is the second type of solution to the problem: that is, to introduce into the transaction relation a mechanism that mitigates the externality problem. Organizational transaction is a concept used to discuss a transaction of this sort.

3-2 Organizational Transaction

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In order undertake a comparative analysis of market and organizational transactions, we must first clarify the two concepts. We will characterize market transactions as those that fulfill the following two conditions: (1) the transaction is done on a one time basis and thus is short-term; and (2) the other party in the transaction is not restricted to anyone in particular, or in other words is anonymous. Conditions (1) and (2) are closely interconnected. If a transaction is repeated, or continued over a long time, then it becomes necessary to designate the other partner to the transaction. In turn, the very act of designating the other partner to the transaction assumes that the transaction is not limited to a single The condition of anonymity means that the parties to a transaction have the freedom to enter into or withdraw from the transaction. The above characterization of market transaction is basically equivalent to the concept of pure market transaction in textbook economic theory.

Organizational transactions, in contrast to market transactions, are characterized by (1) being repeated over a long time and often on a multiple basis (i.e., several goods and services being transacted simultaneously) and (2) having a designated, or known partner to a transaction. Organizational transaction can be considered almost the exact opposite of market transaction.

This classification of transaction forms is completely theoretical, for market transactions in the strictest sense are virtually impossible in the real world.

As Arrow (1974) has stated, if an organization is an adjustment mechanism for making cooperative business endeavors function well in cases where profits derive from such cooperative endeavors, then the market mechanism can also be thought of as a type of organization. If we think of

transactions may simply be a matter of the strength of the link between the transactors involved. Since market transactions are characterized as one-time and anonymous, the link between individual actors is extremely weak. In contrast, ties involved in organizational transactions are somewhat stronger.

One fruitful concept for thinking about the strength of links between actors is Klein, Crawford and Alchian's concept of the "appropriable quasi-rent resulting from discontinuing a transaction". This is defined as the difference between the net benefit when a transaction is continued over a period of time with the current partner to a transaction, and the simple profit which would result if the transaction with that person were discontinued and another person were transacted with (#8). If this quasi-rent is large, then the actor's opportunity cost for changing transaction partners will be high. If this type of relationship exists for all transactors, then the temptation to change transaction partners will be small, and stable transactions can be carried out even in the face of external change.

Organizational transactions have a number of advantages which are not present in market transactions, of which the following three are the most important:

- (1) Economizing on information costs;
- (2) The advantages deriving from flexibility of payment in implicit contracts or multiple transactions; and
- (3) Incentives.

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We will look at these in consective order.

(1) Economizing on information cost

The first advantage, economizing on information costs. may be broken down further into two forms of savings. The first is reduced costs in accumulating information, while the second is the savings which result from sharing information. If a transaction relationship continues over an extended period of time between the same parties, then quite a lot of information can be accumulated. Even in cases where there are some costs involved in accumulating information, if it is assumed that the transaction will be repeated a number of times, then economies of scale may be created in the collection of information.

The collection of information regarding long-term transactions has attracted some interest in recent theoretical literature on repeated agency problems (#8). One famous example of this type of collection of information is the reward system in insurance policies by which policy-holders who do not make claim are given discounts. This reward system was thought up as a means of avoiding the moral hazard of insurance. The reward system can be considered an effective way of collecting information in the following sense. Even if it is impossible to observe some attribute directly, one can make conjectures about the attribute itself by observing something which is related to it in terms of probability.

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This kind of repeated observation plays an important function as a system of evaluation. An example of this kind of long-term monitoring is seen in the market of intermediate goods, which will be discussed below. The decision on the procurement of intermediate goods is often based on the long-term performance of the products. When there is considerable uncertainty about the quality of the product or about the possibility of

improved quality, it may be better to base the decision of procurement on the long-term performance.

The accumulation of information which results from multiple transactions between the same parties also results in economies of scope. Many organizational transactions are transactions for multiple goods and services rather than for a single item. Financing by trading companies and wholesalers is a typical example of this. It is extremely important for the lender of capital to know about the borrower, but if the trading company which deals with the borrower's goods also becomes the lender, it can economize significantly on information costs. A system of financing through flexibility in billing between two transacting parties who are very familiar with one another is another example of this type of transaction.

The second advantage is the benefit of shared information. When cooperative business endeavors are carried on among multiple economics actors, in order to work together effectively it is necessary to share many different kinds of information. This kind of shared information among economic actors in most cases is something intangible, and which cannot be put down in a manual. Common information based on intimate familiarity with each other is one of the advantage of long-term transactions.

(2) The advantage deriving from flexibility of payment in implicit contracts or multiple transactions

If transactions are long-term, then payments can become more flexible.

If it is assumed that transactions will be repeated, then it is unnecessary for payments to be made each time goods or services are transacted which correspond exactly to that item. A number of conditions of payment can be

imagined. For instance, payments may be deferred and paid all at once, or in situations where there are fluctuations in spot market prices, prices between the transacting parties may be stabilized.

The foremost example of economic theory regarding this kind of adjustment of payments is the theory of implicit contracts originated by Azariades, Bailey, and Gordon. According to this theory, long-term transactions also play the role of insurance. An insurance mechanism through implicit long-term contract can be observed in various places in distribution markets, where the attitude towards risk is different among economic actors.

The adjustment of payment to fit particular firms' needs is also closely related to the problem of incentives, which we will discuss later. Methods such as paying a certain sum of money in advance, or, on the conctrary, putting off payment until later, may have the effect of increasing the quasi-rent if one of the parties cuts off the transaction in mid-stream, and thus may play a major role in enabling transactions to be carried out efficiently. We will discuss this point later.

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Flexibility of payment is also closely related to the issue of multiple trnsactions. In most cases organizatinal transactions are not only long-term but also multiple. For instance, in the case of transactions between wholesalers and retailers of the type 2 system discussed in the previous section, it is not only commodities that are transacted for, so too is information about market trends, the availability of commodities, financial services, technical training and so on. Rather than having an exact payment for each individual item, there is a lump sum payment for all of them together. Since it is difficult to judge exactly how much such things as information and technical training cost and what benefits they provide, and

thus difficult to decide how much should be paid for each individual type of service, the more general type of payment is used.

(3) Incentives

As has already been discussed, it is often difficult to manage a long-term transaction efficiently by means of an explicit contract. Thus, in order to carry out organizational transactions effectively, it becomes important to bring a mechanism into the transaction that will somehow provide incentives for each actor to behave cooperatively. The following simple example based on the theory of repeated games provides many insights into the mechanism of cooperation in organizational transactions.

Table 3 shows the famous "Prisoner's Dilemma". There are two players, A and B. The numbers on the upper left represent A's payoff, while the lower right represents B's payoff. As can be quickly read from the diagram, in the first round of play, no matter what the other player does, the best play is always to betray the other. The special feature of this game is that, since in this way both players will choose to betray the other, they will end up at a point neither wishes to arrive at (1,1). As a result, in a one-shot game the players will not be able to reach the point (3,3) which both would like to reach.

[Table 3 around here]

But this condition changes significantly if the game is allowed to repeat indefinitely. In this case it is possible for the game to end at the (3,3) point. This may happen, for instance, if the following strategy is adopted.

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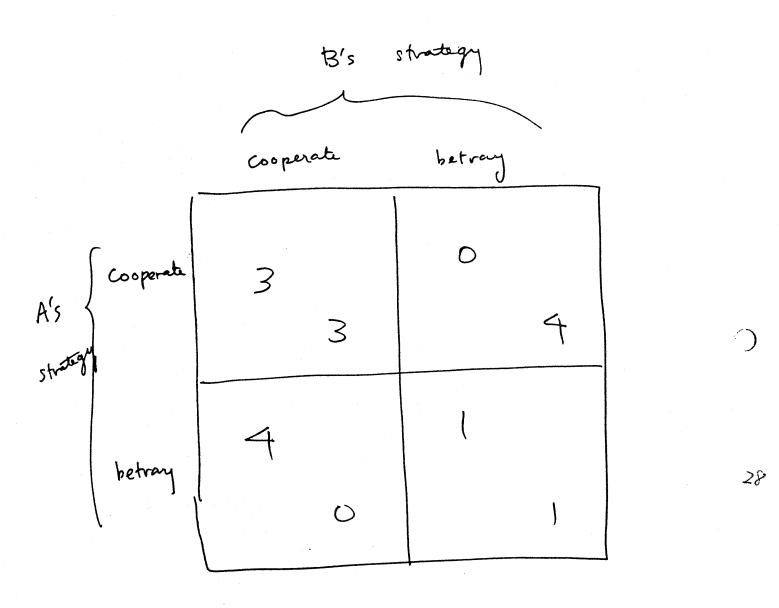


Table 3

2. In the second and latter rounds each players adopts the strategy the other player used in the former round (if in the first round it was cooperation, then each will cooperate, if betrayal, then each will choose to betray the other.)

This is called a "tit for tat" strategy. If a player knows that the other player will adopt this strategy, he knows that he cannot achieve any benefit by betraying the other. Therefore he will continue to act cooperatively (#8).

The above game example is abstract, but it shows the essence of organizational transactions' incentives towards cooperative behavior. If the future benefits which would be lost by betraying the other are greater than the immediate gains to be made from betrayal, then each economic actor will probably behave cooperatively rather than betraying. In short, what makes organizational transactions work is the future gains which would be lost by betrayal. This is the quasi-rent which would be lost if the transaction were stopped, which we discuss at the beginning of this section.

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The size of the quasi-rent of the organizational transaction may be either artificial or natural. Let us first discuss the latter. As is often observed in any society, and particularly in the Japanese society, long-term transactions are easily maintained, and cooperative relationships develop easily in provincial communities where there is relatively little movement of population. In a small, closed society one comes into contact with the same people all the time, and it is extremely important to maintain good relationships over the long term. Therefore, each economic actor will

probably try to behave cooperatively, making it easy for organizational transactions to be carried out effectively.

Hayami and Ohtsuka's work on the sharecropping and on the wage system of jeepney in the Philippines is quite interesting on this point. Their main thesis is that the system of land and blood relationships has a profound influence on transaction forms. According to their study, in the suburbs of Manila the system of payment by tenant farmers to their landlords, and by jeepney owners to jeepney drivers, is in the form of leases, while a little farther out in the country it takes the form of profit sharing. If the only consideration were the tenant farmers' and drivers' incentives, then the lease system would be preferable. The reason is that under a lease system additional earnings from diligent work accrue completely to the tenant farmer or driver himself. But from the point of view of the tenant farmer and driver's stability of income, profit sharing is better than a lease system. Since, in the country, land and blood ties work against individual farmers or drivers slacking off at their jobs, there is no need to rely on a lease system to preserve ncentives, and thus profit sharing is used.

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The role that land and blood ties play here is to either banish the individual from the community, or to ostracize him if he does not behave as generally expected in his particular region (for instance, if he is lazy at his work). If the economic actor has a number of ties with his community, this kind of ostracism signifies a tremendous loss. This kind of mechanism works in great and small ways in the Japanese society, especially in rural areas, where there are rigid communities.

The role that reputation plays in establishing the size of the quasirent is also quite large. The benefits which a given economic actor may expect in the future depend on the kind of reputation he has acquired in the market and in society. Consumers will tend to base their decisions about whether to purchase a given good or service on the reputation of the seller and on their own experience with him. Since this reputation depends on what kind of goods or services the seller has provided in the past, he will probably try to avoid weakening his reputation in order to achieve short-term gains if he will incur a heavy cost by doing so.

This kind of reputation mechanism works quite effectively in the Japanese society, where population is quite homogeneous. The mechanism works particularly strongly in rural areas or in local small towns, where there is little long-distance population movement, the pool of people who are available to buy from the shop is limited, and there are many opportunities for the customers and potential customers to meet due to the relative insularity of the society.

Rapid growth of the postwar Japanese economy is another element in explaining why organizational transactions expanded so much in this period. In a high growing economic environment a firm which foresees major growth and large future benefits from its reputation will probably not want to sacrifice it in order to pursue short-term benefits. Thus, fast growing firms should have greater incentives to maintain organizational transactions than stagnant firms.

Next let us look at artificially created quasi-rents, which correspond to what Williamson calls "hostage". If one or both parties to a transaction have made some investment which would not be useful for any other purpose, since as long as the transaction proceeds as planned the investment would be wasted if withdrawn from the transaction, this

investment is in effect hostage. This kind of investment is quite common in transaction in the distribution market.

In order for an organizational transaction to work satisfactorily there must be some mechanism which prevents, not only one, but both transacting parties from behaving opportunistically. This is because the other party may break into the transaction and take advantage of it if only one of the transacting parties is concerned with his reputation or feels he has something held hostage in the transaction. In most cases there is some mechanism which discourages opportunistic behavior by either party, but if it is not the case, then it is necessary to create a hostage in some form for both parties.

The reason multiple transactions are so common in organizational transactions is because of the advantages of having a mutual hostage. When two or more economic actors engage in multiple transactions there is a tendency for each actor's hostage to become more important. If an economic actor's other transaction will suffer if he behaves opportunistically in any given transaction, then he loses any benefits which he would have gained from those other transactions and investments in other transactions. In effect, each is holding the other hostage.

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Finally, it is important to note that the stability of relations involving organizational transactions depend on the development of the external market. What I am calling the "external market" is that market which provides an opportunity for selling or buying the goods and services covered by the organizational transactions in question to or from third parties.

There is an inverse relationship between the level of development of the external market and the level of development of organizational

transactions. If organizational transactions are well developed and almost transactions are long-term, then the external market will be underdeveloped. And since the weakness of the external market increases the size of the quasi-rent which is lost by dropping out of organizational transactions, it in turn makes organizational transactions all the more But, on the other hand, if for some reason the external market stable. becomes more developed, organizational transactions will be destabilized.

3-3 An example of organizational transactions

A story which the author heard in an interview with paper production points to an important problem regarding organizational technicians transactions and the issue of access to the Japanese market.

For newspaper publishers, who are under great pressure to meet deadlines as they try to get their newspaper printed, the cost of having paper tear in the midst of printing is extremely high. Therefore, it is important to obtain newsprint paper which is highly resistant to tearing, which leads the newspapers to do the following.

The newspaper publishers purchase newsprint paper from a limited number of paper companies on a long-term base. At fixed intervals, such as once a month, the newspaper publishers calculate the tear ratio for the newsprint purchased from each paper company. This system has a number of the characteristics of organizational transactions.

First, even if the results do not immediately effect how much will be purchased in the next period, they do provide a basis for long-term plans. Thus, the evaluation of each paper company is based on their long-term performance and are not affected by short-term disturbances. Since

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evaluations are based on lon-term factors, each company has a strong incentive and enough time to make paper which does not tear. If one takes into consideration the importance of tear resistance in newsprint, it is actually a commodity which is far from being standardized.

Second, we would like to point out that "face-to-face competition" may actually be more intense than anonymous market competition. According to the interview with the technicians, drops in their companies' ratings put intense pressure on them and provide an important motivation behind product improvement. It is thus quite possible for competition with rivals with which one is very familiar to be more heated than highly anonymous, profit driven competition. Though this is an area that point has not yet been sufficiently illuminated by theory, there are many other examples (#9).

Thirdly, by carrying out its transaction on a long-term, face-to-face basis, it is easier for the newspaper publishing company to shift the focus of competition in a direction which is useful to it. In the competition over selling newsprint, there are a number of different aspects, such as price, tear resistance, thickness, weight, flexibility of delivery, and flexibility of payment which could take on importance. If the newspaper publisher were to make clear its evaluation of these other factors in its periodic report, then competition among the paper companies would probably come to reflect these other factors. It is not clear whether highly anonymous market competition would produce the same results as "directed competition" (#10) or not.

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As we have seen above, the long-term and multiple transaction relation which is quite common in the Japanese distribution market, plays an important role in the allocation of resources. At the same time it cannot be denied that this transaction relation and the distribution system based on it are a barrier to new entrants, not only to foreign but also domestic firms. It is extremely difficult to derive any policy implication for the issue, since we do not have a good theory to deal with the problem.

Trade policy issues are usually analyzed in the framework of the standard trade theory which is based on a simple market transaction mechanism. The commodities in this theory are quite standardized, and unstandardized goods like the ones discussed in section 3 lies beyond the scope of this theory. In the Ricardian theory of comparative advantage, for example, the set of commodities are given from the beginning, and comparative cost structure determines the pattern of trade. There, prices are the only important variables, and little attention is paid to nonprice factors. There is a considerable gap between the traditional trade theory and the market access issue.

Of course, not all trade theories deal with standardized commodities only. For example, in Vernon's product cycle theory the trade and production pattern of commodities differs considerably depending on which stage the commodities are in. Since this theory provides an important insight to our problem, let me discuss it briefly.

Consider a concrete example, say the case of a dish-washing machine.

In the early stages this product was far from being standardized. The size of the market for the product was still small, the product itself left much

room for improvement, and there was considerable uncertainty about the future state of the product.

The process of development in these stages was trial and error, and there was a lot of interaction between the producers and the market. A factory was like a laboratory, far from being a large-scale modern factory. In these stages, the location of factories was quite important, since the producers had to find out what kinds of dish-washing machines the market needed. Thus, it was natural that dish-washing machines first appeared in the United States, where there was strong potential demand for them. The price of the product in these stage was only one of many factors of importance for the producers.

In the later stages washing machines became much more standardized. The market for the product grew, and there was little room for improvement of the product. In these stages the production cost was the most important element for the producers. Therefore, the producers took advantage of scale economies. The factories in these stages were modern large-scale ones, and the distance between the factory and the market was of little importance. If labor cost is important, the factory will be located in foreign countries.

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It is obvious from the above example that the trade and production pattern of commodities is considerably different depending on the stage of the product. In the early stages the production location will be close to the market and the flexibility of the production system will be more important than scale economy, while in the later stages the distance from the market is not important and cost becomes the most important element. In other words, the market element or demand element is important in the early stages, while the cost element is important in the later stages.

Most of the discussion about trade policy issues takes account of only the second element, that is the cost element, since the discussions are based on a cost-oriented theory of international trade. The market element or demand element is very much neglected. As discussed in section 3, we cannot neglect the nonprice element when we consider the market access issue. We need a model of international trade that can be integrated with domestic transformation in distribution markets.

Footnotes

- 1. See Komiya and Itoh [1988] for the developments and the present state of formal trade barriers of Japan.
- 2. For example, this ratio covers both the transactions of consumption goods and intermediate goods. Since Japan imports many materials and intermediate goods and exports final goods, the ratio has a tendency to be high for Japan.
 - 3. See Tamura [198*] for more details.
- 4. There doe exists some inefficiency due to the multi-layer wholesaler system. For example, in Japan the so called <u>itten ittyouai sei</u>, under which manufacturers assign a particular wholesaler to each retailer, is commonly observed in many types of commodities. Thus, retailers must buy the commodities from the assigned wholesalers. This kind of rigidity introduces some distortions in the distribution market. Large supermarket chains often purchase commodities directly from manufacturers, since the volumes they purchase are large. However, even in this case, where wholesalers are not between manufacturers and supermarket chains, manufacturers often ask supermarkets to pay fixed margin to wholesalers.

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- 5. According to an informal conversation with a manager in a large department store, the share of apparel which the department store covers the whole risk of dead stock is about 20 to 25% of all apparel sold in the department store.
- 6. See Itoh and Matsui for more details about organizational transaction.
 - 7. See various works of Williamson cited in the references.

- 8. This quasi-rent includes the cost of discontinuing the on-going transaction. Thus, as long as the transactions continued, the quasi-rent is positive.
- 9. Itoh and Matsui characterize the mode of competition under this face-to-face competition in more detail.
 - 10. This concept is discussed in Itami and Senbongi.

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