94-F-28

Interfirm Relationships

Firms and Industrial Organization in Japan (11)

by

Yoshiro Miwa
University of Tokyo

August 1994

Discussion Papers are a series of manuscripts in their draft form. They are not intended for circulation or distribution except as indicated by the author. For that reason Discussion Papers may not be reproduced or distributed without the written consent of the author.

Interfirm Relationships

Firms and Industrial Organization in Japan --(11)

Chapter 10 (with the same title),

of the book forthcoming in 1995

with REFERENCE for the whole volume.

Yoshiro Miwa

University of Tokyo

[Mac94chy.miwa]

Chapter 12. Interfirm Relationships

12-1. Introduction

The predominance of small business and the slimness of large firms are the two basic facts of the Japanese economy. As shown in the previous chapter, a firm is a legal fiction and its boundary is usually different from the effective boundary of decision-making unit which hereafter is referred to as organization. Therefore, these facts do not necessarily imply that the effective boundary of the Japanese organization is small and that the Japanese economy is idiosyncratically decentralized. The central issues in this chapter are How the organizations and inter-organizational relationships among them are formed and function? How the economic activities within each firm are coordinated? and Who take the leadership in designing the system for their coordination?

Keiretsu and network are the recent trendy keywords with which people are fond of talking about Japan, particularly in explaining the "secret" of Japan's industrial success. But neither is well defined and appropriate for its accurate understanding. As shown, keiretsu is too vague to be an analytical concept. Of three commonly discussed subgroups of keiretsu, horizontal keiretsu (corporate groups), vertical keiretsu (supplier-assembler relationships), and distribution keiretsu, the first was shown in Chapter 7 to be materially non-existent, and the second was argued in Chapter 4 to be inappropriate for the analysis and should be replaced by other terms such as a supplier-assembler relationship. In Section 12-2, I discuss the third, but only for an illustration of what happens in closely related sequence of organizations, for which the term keiretsu is again a source of misunderstanding. The term network has become the vogue in describing contemporary organizations. One of the major reasons of the increased interest is the emergence of what Best(1990) has labeled "the New Competition," the competitive rise of small entrepreneurial firms, of regional districts and of new industries, whose

characteristic model of organization is a network, of lateral and horizontal linkages within and among firms. Coupled with the conventional image of the Japanese economy with keiretsu trading, predominance of corporate groups, and cooperative behavior of firms, there is now a tremendous interest in "network organizations" in Japan. As shown above, the conventional image is totally false. The two basic facts may call back the term. But I do not use it in the study of interfirm relationships in this chapter, since, as Nohoria[1992, p.12] points out, from "a network perspective, all organizations can be characterized as networks and indeed are properly understood only in these terms. So to say an organization has a network form is a tautology."

As mentioned in the previous chapter, it is far from the truth that economists have a highly developed theory either of the firm or the market, and thereby no one can provide rigorously persuasive answers to questions related to them with the established standard formal model: how are interfirm relationships formed and maintained? how do they function? are they long term and stable? are they exclusive for rivals and closed for new entrants? Underlying these questions is the basic question of Coase[1937]: "Why a firm emerges at all in a specialized exchange economy?" Most parts of this chapter is for case studies of interfirm relationships from three check points: (1) whether "transaction cost," particularly for large Japanese firms, is lower in the market? (2) whether these relationships are irresponsive to the change of environmental factors, such as demands and technology? (3) whether new entry to some Japanese markets is much harder than elsewhere and even impossible because of these relationships? I choose these three points for two reasons. First, the questions listed above are too general to attack. Second, these are the points why Japanese interfirm relationships attract a wide attention, both of those criticizing them as a cause of the "closedness" of the Japanese economy and of those praising them as a source of the industrial success.

Neither Japanese nor American (or firms in other countries) are particularly badly managed, and the mechanism of comparative advantage

works everywhere. Interfirm relationships upon which the production system is organized may be one secret of the success of the Japanese machinery industries, including automobile industry, but we observe similar relationships also in comparatively disadvantaged industries, like textile industry. Focus in this chapter centers not on the contribution of interfirm relationships to productivity increase and growth but on their functions themselves. In 5 sections from 12-4, I present 5 case studies from 3 industries. The first one is supplier-assembler relationships from the automobile industry, but the other 4 cases are from industries regarded not so successful, 1 from the distribution sector and 3 from the textile industry. The basic objective of case studies is to investigate Japanese interfirm relationships in action, applying to them now developing theories of the firm, by which we can reach an understanding of the organizational issues far better than those the conventional ones provide. It in return will contribute to the progress of the study of the firm and the market, and Japanese firms and their interfirm relationships are a rich source of materials for the further research along this line. At least 4 points immediately follow with these case studies: (1) Extensive division of labor with long-term relationships prevails everywhere; (2) These relationships are formed and maintained as a result of voluntary agreement of rational participants, and a new entrant which offered a profitable business chance could find able trade partners; (3) "Transaction costs" through these relationships are not particularly low for large firms in comparatively advantaged industries; (4) Firms within these relationships often fail in adopting to the environmental changes partly because of these relationships, which can also be explained as a rational choice of related parties. The last point is observed not only in rather comparatively disadvantaged industries but in advantaged. Recall the comparison of Toyota as a coordinating agent of the extensively divided production system with rivals in Chapter 4, where as a result there exists a huge difference of productivity among Japanese car assemblers.

In Section 12-2, for an illustration of what are interfirm relationships, I briefly discuss distribution keiretsu and make 6 general comments on the argument that they are exclusive. Section 12-3 is the definition of issues for the following case studies, and 5 sections from 12-4 onward are 5 case studies. These case studies of interfirm relationships are from three check points mentioned above. Section 12-4 is a case from the automobile industry, Section 12-5 is a case from the distribution sector, the success story of Seven-Eleven Japan, and the next 3 sections are 3 cases from the textile industry, synthetic fiber textile industry, silk dyeing in Kohaba-Yuzen, and men's wool suits. In Section 12-9 I discuss one of the most striking peculiarities of Japanese industrial organization, namely, the predominance of stable, long-term interfirm relationships with a non-exclusive characteristic. Section 12-10 is concluding remarks, where I stress 2 points: First, the argument in this chapter (and in the previous chapter) is not peculiar to Japanese firms; Second, Japanese firms and industrial organizations are exciting and charming research targets, but also quite dangerous ones, and therefore we should not draw hastily conclusions.

12-2. An Illustration of Interfirm relationships: Distribution Keiretsu

The fields where closely coordinated interfirm relationships abound is distribution and marketing, which the term "marketing channel" symbolically reveals. Manufacturers, wholesalers, and retailers as well as other channel members exist in channel arrangements, which share the work load for the functions or flows, typically such as physical possession, ownership, promotion, negotiation, financing, risking, ordering, and payment. As Stern and El-Ansary [1988, p.14] argued, "the basic economic rationale for the emergence of channel intermediaries and institutional arrangements can be understood in terms of the need for exchange and exchange efficiency, minimization of assortment discrepancies, routinization, and the facilitation of search procedures." Thereby, like the automobile production

system based on closely coordinated supplier-assembler relationships studied in Chapter 4, a marketing channel is organized and functions so as to minimize the costs for providing goods and services consumers demand, where the activities of each decision units are coordinated by a channel leader. The power of channel leader is the result of the specific characteristics, experience, or history of the firm and its management, and accumulated human capital. Alternatively, power source may reflect particular characteristics of the environmental forces impinging upon the channel and the channel member's ability to capitalize on these forces. Thus, the basic logic underlying the argument in the previous chapter on the formation and maintenance of organization specific human capital and its importance also applies here, and thereby an inside-outside distinction neither with the legal definition nor with an effective boundary of a firm whatever the definition necessarily make sense.

Japanese distribution system has quite often been criticized, particularly in the recent US-Japan Structural Impediments Initiatives, as a cause of closed market.[1] Japanese distributors, such as wholesalers and retailers, are regarded as members of distribution keiretsu controlled by a leader, typically a manufacturer, which makes new rivals, particularly those from abroad, hard to find their distributors. This argument is too ill-defined for a close examination. In this section with illustrations of interfirm relationships I make six general comments on this argument, and in later sections I investigate with case studies the exclusiveness and closedness of interfirm relationships. (1) Firms in almost every industry always argue that they suffer from excessive competition. Coupled with Japan's industrial success, this fact is inconsistent with the assertion that Japanese markets are closed for entrants. Therefore, even if some markets are closed, their importance to the whole economy must be limited. (2) Everywhere in developed economies, members in a distribution-marketing

[1] Even if this argument is supportable, whether it is a cause of the persistent trade imbalances between two economies is another question. Like most economists, I believe it is the result not of closed markets but of macroeconomic imbalances in each economy.

channel are closely connected, and their activities are well coordinated when it is efficient. Thus, whether there is something essential which distinguishes the Japanese distribution system from those of other economies and makes worth calling it *keiretsu* deserves a close examination. (3) In a world of exchange by agreement, long-term relationships are not merely the result of choices in the past but must be based on its prospects for the future. Therefore the observed long-term stability does not imply its continuation. As will be exemplified in the case studies, an entrant which provided profitable business chance could find able trade partners even in the market where long-term relationships had prevailed. (4) People often misunderstand that long-term relationship exists almost always only with one partner, thereby is exclusive. But this is far from the truth at least in Japan. Like supplier-assembler relationships in the automobile industry studied in Chapter 4, retailers in almost every industry, to which the term distribution *keiretsu* is dedicated, trade with multiple suppliers. Automobile distribution is a famous exception, and other industries such as home electronics, cosmetics, and groceries are not exclusive in this sense. (5) A distribution-marketing channel is organized so as to minimize the costs for providing goods and services consumers demand. When what consumers demand differs between economies, the distribution-marketing organization may differ. One reason why members in the Japanese automobile distribution channel are closely connected is such highly differentiated products that otherwise the supplying costs increase tremendously. For instance, in a month in the spring of 1990 Toyota provided about 3,000 types of Mark II (a mid-size sedan, Cresida in the U.S. market). They produced on average only 7.8 cars for each type, and only 1 car for more than the half of all types. Toyota sells cars in Japan through 312 dealers (about 4,500 shops to each of which about 10 sales persons belong), and it is rare for a dealer to sell more than two cars of the strictly same type in a month. They provide custom-made cars within two weeks. (6) Within a marketing channel the work load for the functions are shared by members, which is a part of the organizational design. As the result, the function

of a distributor (for instance, department store in apparel goods distribution) in Japan is different from that in some other economies, which may function as an entry barrier or cause misunderstanding. For instance, a Japanese department store sells mostly on consignment, and wholesalers perform merchandising functions and bear the risk of unsold stock. A tragic comedy appeared that a foreign apparel maker, which proposed a direct trade with a department store but was advised to go to a Japanese wholesaler (an apparel maker), got angry and protested as the abuse of power of distribution <u>keiretsu</u>. Akebono Brake's recent success in the U.S. market is another example. Like Japanese manufacturers in many machinery product markets, including car parts, Akebono, the largest manufacturer of car brakes in Japan, has supplied custom-made products to each assembler in long-term relationship. (A Japanese assembler usually requests a supplier to present a rough design of a customized part 4 years before the purchase of products begins.) It proposed the same transaction to U.S. car parts assemblers such as Ford and GM, that were accustomed to purchase standardized products from U.S. car parts manufacturers and welcomed the proposal. If a U.S. manufacturer proposes a transaction to Japanese assemblers with standardized products, buyers will ask customization without a high extra-charge like that with Japanese suppliers, and they will not reach an agreement. This is a result of difference both of each supplier's responsiveness to market demands and of social attitude toward customization as an environment.

12-3. Are Transaction Costs Lower for Large Japanese Firms?

Despite the two basic facts of the Japanese economy, many people may still argue that large Japanese firms play a predominant role in the economy because they subordinate and control small business. The conventional view of the position and role of small business is symbolized by the term "dual economy," which suggests that large firms in the modernized industrial sector subordinate, control and exploit small business in the traditional

sector. This implicitly assumes that large firms can and do exercise significant power in exploiting small business, whose freedom of choice is strictly restricted. What is the cause of this power? What is its originating mechanism and the limits to the "area of acceptance" (Simon [1976, p.133]), within which the subordinate is willing to accept the decisions made for him by his superior? These questions lead us to an understanding of Dore [1983, p.463]'s statement:

> Transaction costs for large Japanese firms may well be lower than elsewhere. 'Opportunism' may be a lesser danger in Japan because of the explicit encouragement, and actual trading relationship of mutual goodwill. /The stability of the relationship is the key. Both sides recognize an obligation to try to maintain it.

An economist's intuition reminds us of a simple fact that there must be no heaven even for large Japanese firms where they enjoy free lunch. Instead, we must investigate How and for what the stability of the relationship is maintained? and What are their functions and maintenance costs?

As shown in Part I, we should not interpret the prevalence of interfirm long-term relationships among small businesses and between small businesses and large firms as a direct result of the subordination of small business to large firms in the "dual economy" situation. Like large firms, small businesses enjoy a wide freedom of choice in a world of exchange, and we should regard these choices as mutual, voluntary agreements. Large firms also need to offer incentives to induce small firms to make and maintain long-term relationships with them.

Therefore, to validate Dore's statement, we have to ask why large firms' costs to offer incentives are lower in Japan than elsewhere. To emphasize the prevalence of "moralized trading relationships of mutual goodwill" and the strong tendency of most Japanese to "feel more comfortable in high-trust relations of friendly give-and-take" (Dore [1983, pp.

463 and 472]) may be persuasive for some; however, we need further to ask why, how, and even whether it is true. Trust is so charming and inviting a word that without a clear definition and understanding it creates so much confusion and mythfication. As Granovetter [1992, p. 40] rightly noted, even "[t]o say . . . that such devices produce 'trust' seems . . . to stretch the word too far, where it applies to all situations where individuals are willing to enter a transaction." In 5 sections from 12-4 onward, I will analyze 5 cases of interfirm relationships in 3 industries to see how they are maintained. I also examine whether transaction costs are indeed lower in Japan than elsewhere, and whether long-term relationships functioned as an entry barrier.

When we accept as valid Dore[1983]'s argument that transaction costs for large Japanese firms may well be lower in Japan than elsewhere, the conclusion that the legal boundary of a firm is different from the actual one leads us immediately to the following questions. Why, then, do large firms exist? Does Dore's argument apply only to large firms? If yes, then why is it possible, and what secures such privileges for large firms? Transactions are thought to be brought within the firm when doing so minimizes their costs. This process implies that the internalization of transactions occurs when the costs for carrying them out within firms are relatively low. Therefore, we need some explanation of why in Japan the costs for carrying out transactions within firm are still lower than the costs in the market. As Tirole [1988, p.20] pointed out in commenting on the technological view, which defines the size of a firm, it is not clear why economies of scale should necessarily be exploited within the firm, and they could, a priori, also be obtained through contracting between legally separate entities. Interfirm relationships should be seen as the results of voluntary agreements between firms, even when they involve large firms and small firms.

The following questions are related to Dore's "moralized trading relationships of mutual goodwill . . . [whose] stability . . . is the key" (p.463), and what is called "trust." Why have these relationships and trust

emerged, and how have they been maintained and reinforced? How have they affected the behavior of the firms concerned, their trade patterns, and both interfirm and intrafirm relationships? What are their working mechanisms? What are the costs of their creation and maintenance? If there is variance in the density in such relationships among industrial sectors, how and why does it appear? To what degree should we regard the peculiarities of interfirm relationships in Japan due to "environmental factors," such as "culture" and "history"? Arrow [1974, p.23] observed that "[trust] is an important lubricant of a social system. It is extremely efficient; it saves a lot of trouble to have a fair degree of reliance on other people's word." However, we should be careful not "to stretch the word too far", as Granovetter [1992, pp.40-41] rightly cautioned. He "would rather specialize the word to refer to circumstances where one enters a transaction believing that transaction partners will behave properly for reasons that transcend pure self-interest." Too much emphasis on such factors leads us to an "oversocialized conception of man in modern sociology" (Granovetter [1992, p.28])[2] and a variety of mythfications of the Japanese economy. Conversely, too little emphasis leads to an "undersocialized conception."[3]

The emergence of trust, the creation, maintenance, and reinforcement of relationships, and their functions are the core issue in the following case studies. Japanese firms attain their efficiency "in spite of relational contracting" (Dore [1983, p.473]), which assures relatively stable trade relations.

In presenting the basic premises underlying the network perspective on organizations, Nohria [1992, p.4] noted that "[n]etworks contain actions, and in turn are shaped by them." There is no simple answer to the question, such as "To what degree should we regard the peculiarities of

---

[2]"[A] conception of people as overwhelmingly sensitive to the opinions of others and hence obedient to the dictates of consequently developed norms and values" (Granovetter [1992, p.29]).

[3]The view that "classical and especially neoclassical economics operate with an atomized human action" (Granovetter [1992, p,29]).

interfirm relationship in Japan to 'environmental factors'?" Here I only refer to phenomena that suggest the importance of Nohria's premise.

Trevor [1988] reported the development and changing process of inter-firm relations between Toshiba Consumer Products in Plymouth and its suppliers. This process began in 1981, just after the withdrawal of the partner of the joint venture, Rank Radio International. Trevor explained that by "[r]ealizing that management could not go on in the same old way, it committed itself to a new structure and style of work organization, employee participation and, last but not least, relations with suppliers" (p.5). "The absence in Britain and other Western countries of a well developed network of reliable suppliers with whom they can cultivate long-term business relations is seen as a serious disadvantage by Japanese companies" (p.141). Toshiba requested British suppliers to do what it does to Japanese suppliers, and has succeeded in developing the same relations. By the same token, on many occasions managers of Japanese firms complain that one difficulty they face with in their foreign subsidiaries is the custom of "job hopping." It makes their intensive on-the-job training and human capital investment unprofitable and unattractive. However, on many other occasions, managers say that it is not so difficult to overcome job hopping by offering employee a chance to participate and receive training, and thus benefitting from higher rewards.

12-4. A Case from the Automobile Industry

In the next 5 sections, I present 5 case studies from 3 industries. The first one is the supplier-assembler relationships from the automobile industry studied in detail in Chapter 4, which is considered to symbolize the industrial success of Japan. The other 4 cases are from the industries usually regarded not so successful, 1 from the distribution sector, the success of Seven-Eleven Japan and 3 from the textile industry, synthetic fiber textile industry, silk dyeing, and men's wool suits. As mentioned in the Introduction, neither Japanese nor American firms (or firms in other

countries) are particularly badly managed. Likewise, neither automobile nor textile manufacturers (or firms in other industries such as distribution) in Japan are particularly badly managed. But the notions of comparative advantage suggest that some firms in any country will always be uncompetitive compared to firms in the same industry. Later cases show that the interfirm relationships among uncompetitive firms have the same characteristics with those among competitive firms.

A misconception widely prevails that because of the closely connected network of interfirm relationships, called keiretsu, competitive market exists in Japan in a strictly limited area. I cannot agree at all with Dore [1983, p.467]'s statement: "Competition between Japanese firms is intense, but only in markets which are (a) consumer markets and (b) expanding . . . What does concern us here are markets in producers' goods, in intermediates. And for many such commodities markets can hardly be said to exist." Hardly can I imagine how he reached this view, and the following cases will show that competition is intense also in non-expanding, non-consumer markets. This view also is counter-intuitive to most economists, particularly those who have observed Japan's industrial success.

The total number of passenger cars made by Japanese automobile manufacturers was only 20,000 in 1955, when Toyota began their full-scale passenger car production with the Crown. In 10 years the number grew to 696,000, and in 20 years, 4,568,000, of which 40 percent was exported. At the beginning of this explosive development process, there was no history of a comparable industry of mass-production in Japan. Manufacturers had to improve the sometimes defective and low quality of production material and equipment, and raise the low level of product technology. For example, in 1958 Toyota made a successful bid for special procurement of U.S. Army Procurement Agency (APA) in Japan, however, it needed serious efforts to pass the APA's strict quality inspection (see Chapter 4). No suppliers could make automobile parts with a satisfactory level of quality, which suggests that the situation of automobile manufacturers at that time was not much better than that of Toshiba Consumer Products in 1981.

Automobile manufacturers had to persuade suppliers to make investments in human capital and to accumulate technical know-how of sufficient quality, to improve the plant and equipment and, moreover, to build their own production network with their suppliers. This was not an easy task. These firms had to create a new and complicated production system on a large scale. Further, few viewed that the future of Japanese automobile industry as promising. Finally, the financial situation of automobile manufacturers was uncertain and almost no one regarded them as credible firms with a promising future.

Even after successfully establishing efficient production networks with suppliers, automobile manufacturers had to make continuous efforts to maintain and renew this system. They had to induce suppliers to make additional commitments, as suppliers had to follow and meet constantly changing consumer demands and rapid technical advances in production. One difficulty that Mitsubishi Motors at Mizushima confronted in establishing mass-production capacity was to wipe out the distrust of suppliers caused by the trust-destroying actions of Mitsubishi when their three-wheel trucks, their main product at that time, did not sell well in 1958 and 1959 (see Chapter 4). This case shows how it is hard to acquire and maintain the trust of suppliers.

Moreover, automobile manufacturers have had to give technical assistance and advice to suppliers and, in supervising the total system, maintain product consistency and to uniformly upgrade technical capabilities. The costs of such efforts, part of "transaction costs," have been tremendous, as shown in detail in Chapter 4.

Impressed by the prevalence of long-term relations within the networks for automobile production in Japan, we may wonder what kind of magic could make such efficiency improvements and product innovations as we have observed. For example, it is said that Toyota has never broken off relations with its suppliers whose number fewer than 200. The answer to this puzzle is rather simple. Instead of the type of competition in spot markets, they make every effort to induce suppliers to continuously improve

both efficiency and product quality. For example, they usually adopt a double sourcing policy, and use subcontractor rivalry to stimulate competition. Each supplier does not make a single product, and a supplier with good performance can expect an increase in total sales for the next period. By supervising the production process of suppliers and through constant meetings and joint R&D, automobile manufacturers often have the ability to make accurate and detailed advice for efficiency improvement to suppliers.[4]

Besides, three points about this relationship deserve attention: (1) As pointed out in Chapter 4, each relationship has externality to others in the whole production system, and therefore an assembler's freedom of choice is not so wide as it would be in the spot market, which is also a part of the cost of long-term relationship. (2) For instance, a double sourcing policy incurs a cost. Toyota established Hosei Brake in 1968 as a joint venture with Akebono Brake, the largest brake maker in Japan, besides buying brakes from Akebono. Many comment that Akebono enjoys the top-share position in the brake market both with its production know-how and with the economies of scale, and therefore Toyota continuously sacrifices a large profit for this choice. (3) Because of the long-term characteristics of relationships, to begin a business with Japanese assemblers is not so easy. Once begun, it is hard to stop the relationship because of the externality even when they find the new partner unqualified. But this point seems to be too emphasized, since it is a forward looking decision to form a long-term relationship and, as mentioned in Chapter 4, Toyota actually increased the number of suppliers.

12-5. A Case from Distribution: The Case of Seven-Eleven Japan

[4] Not all relations within networks for Japanese automobile production are long-term in character. As is reported in Takeishi et al. [1993], trade relations on the outskirts of the production systems, for example, relations between supplier's supplier and its suppliers, are not so stable.

The next case is from distribution, the success story of Seven-Eleven Japan. It is the franchiser of the biggest convenience store franchise chain, and the pioneer of this business in Japan. The in-shop area of a typical store in this chain is $100m^2$, where displayed about 3,000 items. The basic concept of a convenience store and the know-how for chain operation were imported from the U.S., but both the actual figure of stores and the method of chain store operation are different from that in the U.S.

Seven-Eleven Japan (hereafter, SEJ) has achieved one of the most remarkable successes in the Japanese distribution field. The first store appeared in 1974, and the number of franchise stores was 4,752 at the end of February in 1992, when the number of employees in SEJ was 1,814. The equity value of SEJ at the end of March in 1992 amounted to 38% of that of Toyota with 72,000 employees and 150% of that of Nissan with 56,000 employees. It is not too much to say that SEJ with other convenience chains has greatly changed the daily life in Japan.

This success could have been accomplished only with active commitments of both franchisees and supporting wholesalers. Like Toyota at the starting stage in 1950s (see Chapter 4), to create and establish well-functioning network of interfirm relationships, SEJ had to make efforts in persuading and inducing related parties for commitments. Though SEJ was established in cooperation with South Land of the U.S. as a subsidiary of Ito-Yoka-Do, one of the most successful General Merchandizing Supermarket chains in Japan, the future of convenience chain store business at that time appeared to outside parties to be not more promising than Toyota at the time around 1955. SEJ was not a large firm, and almost nobody was sure of it to become large.

The Japanese distribution sector has been notorious and was quite often criticized for its underdevelopment and inefficiency, for which the symbolic catchword of policies of the government during the past several decades has been the "modernization." A stable network of long-term interfirm relationships, often criticized as distribution keiretsu, can be found in almost every field of distribution. SEJ had to confront and

challenge these relationships and the sense of stability prevalent among related parties.

Three points about the success of SEJ deserve attention: (1) Despite the prevalence of distribution networks with long-term interfirm relationships, the traditional distribution channels were inefficient and irresponsive enough to the environmental factors to allow SEJ to attain such a great success. This implies that the "transaction costs" for established large firms, such as manufacturers and distributors of processed foods and daily products, were high. Because both of the coordination costs and the externality of each choice (recall "safety devices" mentioned in Chapter 4), a leader in the traditional channel could not be responsive to changes in environments, such as demands and technology. (2) Confronting with established long-term interfirm relationships, SEJ could have made a great success, by acquiring cooperations and commitments of the parties, most of which were members of the traditional channel. This happened not only because those relationships were not exclusive, but also because an established relationship were a result of a rational choice and some distributors rationally changed their business to the more profitable one. This, in return, suggests that at least some long-term relationships are maintained simply because related parties do not find another more profitable business. Coca-Cola's entry into the Japanese market is another famous success story. Facing with the traditional distribution networks and expecting the coming age of automatic vending machine, Coca-Cola introduced in Japan in 1950s a new type of distribution system, called "route sales system," that bypassed the traditional channel and attained a big success. In this case, most partners were found from outside the traditional channel. (3) The position of established large firms with long-term relationships often implicitly assumed to be advantageous. This assumption of the first-mover advantage, however, does not always hold. On the contrary, in many situations, the second-mover advantage holds. The above argument requires a commitment of related parties, but commitment is the opportunity to restrict one's own set of

future possible choices or action. It involves credible warranties that some future choices are destroyed. Thus, an assembler's freedom of choice in the automobile industry is limited. This also applies to home electronics makers with well established long-term relationships with retailers, which once was the source of its prosperity, are now suffering from its "transaction costs." Because of the success in the past and the externality among retailers, makers cannot appropriately adopt the distribution system to the changing environments by selecting retailers.

12-6. A Case from Synthetic Fiber Textile Industry

The next 3 cases are from the textile industry, the first of which is a case from synthetic fiber textile production, mainly that of nylon and polyester. For most, mass-production type machinery industries, such as automobile and electronics products, are the symbol of Japan's industrial success, and interfirm relationships and division of works among firms in these industries, particularly those in the automobile industry, have drawn much attention. As notions of comparative advantage suggest, however, firms in other industries are not particularly badly managed and also contributed to the Japan's industrial success. The textile industry is a representative of those industries, which once was a representative export industry but has lost its strong comparative advantage.[5] Among 3 cases, synthetic fiber textile, silk dyeing, and wool textile, interfirm relationships for synthetic fiber textile production is the most newly emerged. The organizer's difficulty at the starting stage in this case were similar to that of automobile manufactures and Seven-Eleven Japan.

Synthetic fiber production was begun in Japan by 2 rayon producers, nylon by Toray in 1955 and polyester by Toray and Teijin in 1958, which

---

[5] Dore [1983]'s understanding of low transaction costs for large Japanese firms was inspired by the organization in the weaving section of Japanese textile industry. He studied "the small town of Nishiwaki . . . whose industry almost wholly devoted to the weaving of ginghams chiefly for export to Hong Kong to be made up into garments for Americans" (p.461).

were not the most prosperous in the textile industry of that time. What they had to challenge at the start was two-fold, the creation of markets for the products and the creation of a production system, of which here focus centers on the latter. Although their primary concern was fiber production, they had to persuade and induce firms in the following stages to use these new fibers. Weavers, firms in dye-works, garment manufacturers, and retailers were all potentially both fiber users and members of the production system. They were large firms, large enough to be the licensees of Dupont and ICI patents. Neither the prospects for the future of the new business nor the stability of these 2 firms appeared promising to outsiders. Like suppliers in the automobile industry, related parties had to make commitments for new business by adopting themselves to different technology.

They chose a local area, called <u>sanchi</u> [literally, a local production area], in the Hokuriku district which includes Fukui and Ishikawa Prefectures. In this area, many textile firms and related manufacturing had formed a large specialized area for rayon textile production and had prospered for the preceding several decades upon the long tradition of silk textile production. Synthetic fiber makers organized there their own "production team" for each. Interfirm relationships in these teams were different in 3 points from the traditional ones in the textile industry, and they were called <u>keiretsu</u>: First, a fiber maker was the leader of the team, and played an active role in technological development of the team and gave technical guidance to other members; Second, a fiber maker bore the incomparably large portion of risk of the new business, and most other members finished products as piecework; Third, the degree of exclusiveness of interfirm relationships was rather high, that is, members usually belonged to one production team.

Thus, large firms at the start had to bear the costs for the creation of markets for the products and a production system, with high degree of risk-bearing. These costs continues to be borne by them at the later stage, since the system needed continuous effort for maintenance and upgrading,

like that for the automobile production. Note, however, that these costs were not due to the then existing interfirm relationships. Their challenge was helped for the success by the luck of the depression of 1957-58, the most serious one in the postwar period, which attacked rayon textile weavers in the then established interfirm networks and forced them to search for another chance (see Tanaka[1965, esp. pp.349-353]).

Around 1970 fiber makers changed the policy and persuaded other members to increase their independence by increasing trades with firms outside their team or keiretsu. A manager of a fiber maker explained: such an exclusive relationship implies a high degree of assurance for stable business even during severe depressions, and they judged that such high risk-bearing relationship paid no more. Thus, transaction costs for large Japanese firms in this case were tremendous from the start. They were large enough to change later the basic character of interfirm relationships in their production teams.

Another point deserves attention in this case is the recent success story of Shin-gosen, a series of new types of polyester fiber and its products, which created a new large market for polyester fiber around 1990. Many industry people comment that, without a close cooperation among firms in the industry, such a wide variety of products with fine characteristics could not have been created successively in these 10 years.[6] Seven or eight fiber makers compete each other in this new market, and only a few firms in dye-works and finishing stage have capability to cope with fiber makers requirements. Therefore, the non-exclusive character of interfirm relationships promoted since around 1970 in the industry contributed much to this story. (I will return to this point in Section 12-9.)

12-7. A Case from Silk Dyeing

[6] Some industry members also comment that in Japan textile makers, not chemical firms like most fiber makers in other countries, produce synthetic fibers, which contributes much to this success.

The next case is from silk dyeing, one of the traditional industrial sectors with the longest history in Japan, where we observe complicated, but highly cooperative interfirm relationships and an extremely developed division of works within each of several local areas, called sanchi.[7] Dye-works and finishing stage of Kohaba silk textile (silk cloth of single breadth), especially that of Kohaba-Yuzen, is a typical Japanese industry of the traditional type. Even today, the work for Kohaba silk textile processing depends strongly on the technology and techniques inherited from the pre-capitalistic era, and the interfirm relationships and organizations among related firms reflect the history. In this case also, most of the related firms have formed sanchi.

Nakamura[1979] compares 4 sanchi, famous for Kohaba dye-works, 3 of the traditional type in the urban area, namely, Kyoto, Tokyo and Kanazawa, and newly developed one in the rural area, Tokamachi. Production system in 3 sanchi of the traditional type is organized on the historically inherited, widely-spread social division of labor. Though adopted with modern technologies, the basic character of production system has not changed. Extension of the division of labor in each sanchi is strongly affected by its size, and Kyoto sanchi, whose size, the total number of employees in 1978 was about 30,000, was by far greater than the other two with fewer than 1,000 employees respectively, was characterized with the more extensive division of work. The size of firms, most of which are specialized in one specific work stage, is small. But the variety of available production technology and worker's techniques is wide, and the variety of products is greater in Kyoto.

Three points in this case deserve attention. (1) Tokamachi sanchi was newly born in the rural area, out of and far away from well developed ones of the traditional type. It is characterized with its highly vertically integrated production system. Dye-works in Tokamachi began in 1963, in response to the explosion of demand for standardized, rather cheap Kimono

[7] This section totally depends on Nakamura[1979].

which can be manufactured with simple technology and unskilled workers under a mass-production system. The most profitable period for the firms in Tokamachi was the second half of 1960s, and the number of employees began to decrease drastically in 1970, from more than 8,000 in 1971 to fewer than 4,000 in 1977. Thus, the Kohaba dyeing industry is a collection of at least two separate sectors, though closely substitutable both in demand and technology. Different demands which are supplied by different firms with different technology exist, and the long-term interfirm relationships in the traditional sanchi did not function as a critical obstacle to the development of Tokamachi sanchi. (2) The organization or the system of production, therefore the division of labor, even in Kyoto sanchi, has been recognized by many as ill-organized and ill-coordinated, and needs wide public supports for improvement. Among such policies, for instance, a recent one of MITI (Ministry of International Trade and Industry) emphasizes the creation of "Linkage Production Unit," which symbolically reveals the core of the policy target (see Nakamura[1993]). Extensive division of work with long-term interfirm relationships and the present system based on them have not been flexible enough to reorganize and restructure by itself to the ideal. This has occurred, though each firm, compelled by an incentive for efficient use of own resource, has introduced a lot of new technologies and marvelously adjusted to changing environments. Thus "transaction costs" for related firms in interfirm relationships proved so large. (3) Firms in this case are all small, but what we observed here is almost the same as the 3 preceding cases with large firms. This implies that the amount and importance of "transaction costs" do not depend on the firm size. Therefore, if transaction costs for large firms are lower in Japan than elsewhere, those for small Japanese firms must be also lower.

12-8. A Case from Wool Textile Industry: The Case of Men's Suits

In this section we see the case of production and distribution of men's wool suits.[8] Japanese have a special preference for wool products. Most men's suits are made of wool, and the biggest market for wool textiles is men's suits. More than 10 million men's suits are produced and sold in Japan every year. In the U.S. and U.K. only 38% and 56%, respectively, of men's suits are made of wool, in contrast to 79% of Japan in 1988 (Data from Wool Facts, 1990, IWS). Most textile firms and related manufacturing have formed a large sanchi in the northern part of Aichi Prefecture, at the center of which is the city of Ichinomiya. The demands for men's suits are highly differentiated and delivery requires quite a long lead time. Therefore, supplying men's suits is considered a risky business.

For example, trade negotiations between textile producers and buyers (typically, in Japan, apparel makers) for the spring-summer season in 1994 were carried out in April of 1993 on a sample basis. Retail orders for products for the same season were taken in September and October. Therefore, for the production of sample garments, textile had to be supplied to apparel makers in June and July. To show sample textiles in April, weavers to gathered information and decided their plans by the end of 1992 or the beginning of 1993, 15 months before the market for the products finally opens.

Most firms in sanchi are small, each firm specializing in one specific work stage. They form a well-organized production system with a widely spread division of labor. This area has a history of cotton textile production, but it was only around the turn of the century that firms in this area began wool textile production. Therefore, the present production system should be regarded as a result of rational and free choices by firms rather than a product of long history or a result of constrained choices.

In textile production there are two groups of relatively large firms. One is in the finishing stage, and one of them, Tsuyakin, is of especially large size. This size is understood to be due to economies of scale, and

[8] For the details of this industry, see Miwa[1994].

products of most of weavers are finished as piecework. The other group consists of vertically integrated textile makers, such as Miyuki, Daido and Chodai. They have their own weaving capacity located not in sanchi but in a neighboring area. Each also forms a tight interfirm relationship with independent weavers, most of which depend solely on piecework for one of these textile firms.

Four points about the relationships in this industry deserve attention. (1) The relative share of vertically integrated firms has been quite stable, although there has been a significant change in the character of demands for their products, especially the changing demands for standardized products by mass-production technology and shifts in demands to differentiated products of high quality. (2) The structure of division of labor in production system has not changed greatly. This is despite the fact that the leadership within production-distribution channels for wool products have shifted from weavers and wholesalers in sanchi to apparel makers, such as Kashiyama and D'urban, because of the shifts of demand characters and the change of technological environment. (3) Another consideration is the division of risk among members within production-distribution channels. One example is the large department store channel which has been at the center of the traditionally dominant distribution channel of men's suits. Trade between department stores and apparel makers is on consignment, and the risk of unsold stock is borne by the apparel maker. Apparel makers purchase textiles from weavers, on the condition that they will not cancel their orders made in advance and are allowed to return the products only when they are defective. When this rule is observed strictly by all, the risk is borne by apparel maker. However, because of highly differentiated demands and a long lead time, not all apparel makers strictly observe this rule. Many orders are canceled and the textiles returned to weavers. In many cases, the returned product is up to 30-40 percent of the total volume. In spite of this high ratio of canceled orders, relationships between apparel makers and weavers, and the total supplying system in sanchi are generally stable and long term. In such

"high network density situation, there is more efficient information spread about what members . . . are doing, and . . . better ability to shape that behavior" (Granovetter[1992, p.35]). All weavers know and can forecast almost perfectly the potential canceling ratio of each apparel maker, and apparel makers take this situation into consideration in trading. (4) A revolutionary change which has occurred mainly in the distribution stage during the past 10 years. There has been an explosive growth in new type of retail chain stores for men's suits, which now occupy nearly 50 percent of the market in volume. Aoyama and Aoki are representative. A typical store is located on the side of a main road in the suburbs. The store has a floor area of 400-500m², where 1,000-1,500 sets of suits are displayed. The store has five or six salesmen, including the manager. The number of stores of the biggest chain, Aoyama, increased from 73 in March 1986 to 362 in March 1992 (Miwa[1994, pp.37-41]). Although the change occurred mainly in the retail sector and the leaders were retail chain stores, such revolutionary changes inevitably required fundamental adjustment for manufacturing firms and wholesalers. Such changes could have occurred in spite of stable and long-term relations, and, moreover, not accompanying conspicuous confusion.

12-9. Long-Term Relationships with Non-Exclusiveness

One of the most striking and important peculiarities of Japanese industrial organization is the predominance of stable, long-term interfirm relationships with a non-exclusive characteristic. People often misunderstand that long-term relationship exists almost always only with one partner, thereby is exclusive. But this is incorrect at least in Japan. I use the term "non-exclusiveness" for this non-exclusive characteristic. These relationships are not only one to one but one to multi or multi to multi, with no or not so exclusive characteristics. Much has been said about the "closedness" of Japanese economy and "exclusiveness" of Japanese long-term interfirm relationships. Many people argue that Japanese markets are closed in spite of its efficiency, and they insist that today it is

necessary to accept some efficiency loss to survive in such a "globally open economy". Like most economists, however, I conceive of the substantial current account imbalance between Japan and the U.S. as a macroeconomic problem involving gross national product and gross expenditure, gross savings and gross investment. Therefore, this section is related to the "closedness" debate but not to the trade balance debate. (See Bhagwati[1994] and Krugman[1994], for more information about "closedness.")

Toyota has adhered to a double sourcing policy. It maintains a close relationship with at least two firms, sometimes including other divisions of Toyota itself, which have the ability to develop and supply some specific component. Toyota has advised suppliers, even firms of which Toyota is the largest shareholder, to do business with others, even with Toyota's rivals. As mentioned in Chapter 4, Toyota adopted this policy even at the beginning of its explosive growth. As a result of such policies, many members of Toyota's supplier's association (Kyoryoku-kai) belong to an association of other automobile manufacturers, such as Nissan, Mazda and Mitsubishi. This is one factor which allowed new firms, such as Honda, Mazda and Mitsubishi, successfully to enter the passenger car market around 1960. Thus, tight "production keiretsu" in automobile production is not so closed and exclusive as is usually believed. This is one reason why Japanese automobile manufacturers could have attained such economies of scale and efficiency, in spite of stable long-term relationships.

It is quite easy to find other examples of the same type of interfirm relationship in Japan. In the semiconductor manufacturing-equipment sector, most of the market for testers is occupied by two firms. Fujitsu holds more than 20 percent of the equity of Advantest, and NEC holds 50 percent of Ando. Other semiconductor giants, such as Hitachi, Toshiba, Mitsubishi and Matsushita, are not disadvantaged by these "exclusive" relationships. The market for lithography equipments has been dominated by Nikon, which is regarded as a core members of the "Mitsubishi group" and is not a threat. Some markets for materials for semiconductor production, for example,

silicon wafers and ceramic packages, are also occupied by a few firms, and this has also not caused problems for the manufacturers.

On the contrary, it is rather difficult to find a case in the automobile manufacturing or electronics sector in which a manufacturer does not sell its products, even when there is a large outside market. For example, Matsushita, the largest consumer electronics products and robot maker in Japan, sells its component-inserting machine to many rivals and contributes their high productivity. Key components for VCRs and electronic ovens are produced by a few firms but supplied openly, allowing many firms to quite easily enter the market as assembly makers. The same mechanism applies to the photocopiers and numerical control (NC) machines. There are more than 10 photocopier manufacturers in Japan. The market for two core components in the NC market, numerical controllers and direct current motors, are dominated by Fanuc, and any NC machine manufacturer can purchase them from this firm.[9]

Such interfirm relationships are not limited to the machinery industry. There are only a few large and powerful advertising agents in Japan, one of which predominates. Rival firms in the same industry often maintain close relationships with the same advertising agent, and this has not caused problems for them. When asked if trade secrets do not leak out to rivals, most companies reply that there is no history of such troubles.

In many cases, firms do not care about "spillover" to rivals of the effects of their assistance and cooperative activities with partners. This seems to contribute to the efficient diffusion of technology and technical know-how and the improvement of product quality and economic efficiency of the industry. In many occasions, I heard the same answers to my questions

---

[9] Needless to say, firms outside Japan can purchase these core components from these firms, and they are widely exported. I do not intend to mean that every core component and manufacturing equipments tend to be provided openly by independent, specialized suppliers. This is a part of make-or-buy decision which determines the firm size, and in many cases each competing firm produces core components and manufacturing equipments for its own use. For instance, almost all Japanese car makers produce engines for own use, and silicon wafers suppliers make own silicon ingot manufacturing equipments.

of why and if firms do not care the possibility of leakage and spillover to rivals. For example, I have been told that "We don't care so much about such possibility. We trust each other, and our partners have business with us as their top priority. Moreover, rivals will do the same for us." Sociologists may argue that the central questions then are what this trust is and how it has emerged. I have not much to say about trust. However, what draws observers' attention seems to be the large size of and the components in the "area of acceptance" (Simon [1976, p.133]), the behavior within such interfirm relationships, and a firm is willing to accept the decisions made for it by the trade partner. At least, a firm in such relations trusts a partner in that it makes the relationships top priority, and it will keep confidential the firm's trade secrets and know-how, and it will not sell out the firm to rivals, even if the relationship ends suddenly.

The prevalence in Japan of such stable long-term interfirm relationships with non-exclusive characteristics gives Japanese firms and industrial organization three peculiarities. First, it is not so difficult to enter the market, at least in production. Therefore, the number of competitors in each market is large and market competition fierce. Most business people and bureaucrats call such market situations as _kato kyoso_ or excessive competition. Second, the large number of competitors and fierce competition among them are the result of roughly similar levels of production technology and product quality among rival firms, which again is the result of non-exclusive relationships. Third, through such non-exclusive relationships, economies of scale and economies of specialization, both in production and R&D, are realized. By such a non-exclusive character, firms can check and decrease the possibility of partner's abuse of monopolistic power potentially created through long-term relationships.

12-10. Concluding Remarks

Is the Japanese economy different from other economies? Are Japanese firms and their interfirm relationships different from those in other economies? Are there any important peculiarities in organizations and networks in Japan? Will studies of Japanese interfirm relationships and organizations provide something instructive for restructuring organizations? The answers are, of course, both yes and no.

Many researchers commented on the importance of the discrepancy between the behavior of corporate directors of U.S. firms and the assumptions embodied in U.S. corporate law. Dore [1983, p.459], for example, declares that relational contracting, which is predominant in Japanese business, is "in fact more common in Western economies than textbooks usually recognize." Those who emphasize the importance of "the explicit encouragement, and actual prevalence, in the Japanese economy of . . . moralized trading relationships of mutual goodwill" (Dore[1983, p.463]) should remember the following conclusion of an American lawyer:

> [O]ne can conclude that (1) many business exchanges reflect a high degree of planning about the four categories--description, contingencies, defective performances and legal sanction--but (2) many, if not most, exchanges reflect no planning, or only a minimal amount of it, especially concerning legal sanctions and the effect of defective performances. As a result, the opportunity for good faith disputes during the life of the exchange relationship often is present (Macaulay[1963, p.60]).

Each firm and each group of firms has its own peculiarities, and therefore can survive in a market economy. We have little to gain by asking such questions as Is the Japanese economy different from other economies? or Are Japanese firms and interfirm relationships different from those in other economies? The same is true, of course, to Are American firms different from others? Instead, we should ask Do such difference and peculiarities cause anything remarkable and important? If the answer is yes, we should

consider to what extent and how. Given Japan's industrial success, many people are interested in what underlies this growth and how it was attained. Coupled with the traditionally dominant views of Japanese economy--symbolically phrased as Japan Inc.--including an understanding of a strong central government with an effective "industrial policy," keiretsu trading, predominance of corporate groups, and cooperative behaviors of firms (probably, strongly backed up by exotism), there has been a strong tendency to pick up some terms and immediately view them as the main engines for economic growth. Dual economy and cheap labor, "social dumping," protectionism, and industrial policy have been in this group in the past, and recent attention has focused on Japan's industrial organization characteristics, such as keiretsu trading, corporate groups, Mainbanks, and stable but flexible interfirm relationships.

We should not hastily select the causes of rapid growth and the "flexibility" of the Japanese economy. Until recently, the dominant view of Japanese interfirm relationships has been that they are "backward," a fossil of the long era of feudalism. (This view still prevails in distribution sector.) The situation reversed suddenly in 1980s, and people began to regard these relationships as the secret of Japan's industrial success. In my view, this reversal occurred not through careful studies and with ample evidence, but rather with the impressive rapid growth and industrial success of the Japanese economy. Therefore we should keep in mind the possibility that the view will change drastically when other sectors are carefully studied or when the speed of Japan's economic growth slows.

Talks on the Japanese firms and the interfirm relationships abound. The network concept has become fashionable, and we now witness a flood of articles and books on Japanese networks and organizations. This phenomenon has been amplified by the industrial success not only of Asian economies, such as Japan, but also Italy. We are now searching for a set of anecdotes, instead of important real-world phenomenon to apply recent theoretical research on organizations and networks (see Ramseyer[1993, pp.2012-3]). Japanese firms and industrial organization, especially interfirm

relationships, are exciting and charming research targets, but also quite dangerous ones. Therefore, we should not draw hastily conclusions.

As an economist, I agree with Simon[1991]'s cynical comment:

> A mythical visitor from Mars, not having been apprised of the centrality of markets and contracts, might find the new institutional economics rather astonishing. Suppose that it . . . approaches the Earth from space, equipped with a telescope that reveals social structures. The firms reveal themselves . . . as solid green areas with faint interior contours making out divisions and departments. Market transactions show as red lines connecting firms, forming a network in the spaces between them. Within firms (and perhaps even between them) the approaching visitor also sees pale blue lines, the lines of authority connecting bosses with various levels of workers. As our visitor looked more carefully at the scene beneath, it might see one of the green masses divide, as a firm divested itself of one of its divisions. Or it might see one green object gobble up another. At this distance, the departing golden parachutes would not be visible . . . [T]he greater part of the space below it would be within the green areas, for almost all of the inhabitants would be employees, hence inside the firm boundaries. Organizations would be the dominant feature of the landscape. A message sent back home, describing the scene, would speak of 'large green areas interconnected by red lines.' It would not likely speak of 'a network of red lines connecting green spots' (p.27).

Reference

Adelman, Morris A., [1963] "A Commentary on 'Administered Prices'," in Subcommittee on Antitrust and Monopoly on the Committee on the Judiciary, US Senate, Administered Prices: A Compendium on Public Policy, U.S. Government Printing Office, pp.22-24.

Administrative Management Agency [Gyosei Kanricho] [1981] Gyosei Shido ni kansuru Chosa Kenkyu Hokokusho [Study Report on Administrative Guidance]. Tokyo: Administrative Management Agency.

Alchain, Armen A. and Harold Demsetz [1972] "Production, Information Costs, and Economic Organization," American Economic Review, pp.777-795.

Aoki, Masahiko[1990] "Toward an Economic Model of the Japanese Firm," Journal of Economic Literature, March, pp.1-27.

API Yearbook (Yearbook of the Association of Japanese Automobile Parts Industry), Nihon no Jidosha Buhin Sangyo, annual. Tokyo: Jidosha Shuppan.

Arrow, Kenneth [1974] The Limits of Organization. New York: Norton.

Asanuma, Banri[1989] "Manufacturer-Supplier Relationships in Japan and the Concept of Relation-Specific Skill," Journal of the Japanese and International Economies, March, pp.1-30.

Bain, Joe, S. [1968] Industrial Organization, 2nd. New York: John Wiley & Sons.

Bank of Japan [1964], Money and Banking in Japan. Tokyo: Bank of Japan.

Bank of Japan [Nihon Ginko] Chusho Kigyo Keiei Bunseki [Financial Statements of Small Business in Japan], annual. Tokyo: Bank of Japan.

Bank of Japan, Hikaku Keizai Kin'yu Tokei [Comparative Economic and Financial Statistics], annual. Tokyo: Bank of Japan.

Bank of Japan, Keizai Tokei Nenpo [Economic Statistics Annual]. Tokyo: Bank of Japan.

Bank of Japan, Shuyo Kigyo Keiei Bunseki [Financial Statement of Principal Enterprises in Japan], annual. Tokyo: Bank of Japan.

Berle, Adolf A., and Gardiner C. Means[1932] The Modern Corporation and Private Property, Macmillan.

Best, Michael H. [1990] The New Competition. Oxford: Polity Press.

Bhagwati, Jaddish [1994] "Samurais No More," Foreign Affairs, 73(3), pp. 7-12.

Calder, Kent E. [1988] Crisis and Competition: Public Policy and Political Stability in Japan. 1949-1986. Princeton: Princeton University Press.

Caves, Richard E., [1964] "Direct Regulation and Market Performance in the American Economy," American Economic Review, May, pp.172-81.

Central Cooperative Bank of Commerce and Industry [Shoko Chukin] [1983] Shitauke Chusho Kigyo no Shin Kyokumen [A New Development of Small Business in Subcontracting]. Tokyo: Shoko Chukin.

Chusho Kigyo-Cho [Small and Medium Enterprise Agency], Chusho Kigyo Shin'yo Jittai Chosa [Survey of the Financial Reality of SmallBusiness], annual. Tokyo: Chusho Kigyo-cho.

Chusho Kigyo-cho [Small and Medium Enterprise Agency] [1976, 1981,1987] Kigyo Jittai Kihon Chosa Hokokusho [Report of the Basic Survey of the Reality of the Manufacturing Industry], 5th, 6th, and 7th.

Chusho Kigyo-cho [Small and Medium Enterprise Agency], Chusho Kigyo Hakusho [White Paper on Small and Medium Enterprises in Japan (Small Business Whiter Paper)], annual. Tokyo: Ministry of Finance.

Chusho Kigyo Jigyo-dan and Chusho Kigyo Kenkyu-jo eds. [1985] Nihon no Chusho Kigyo Kenkyu [A Survey of Japanese Small Business Studies] Vol. 1. Tokyo: Yuhi-kaku.

Clark, Robert [1985] "Agency Costs versus Fiduciary Duties," in Pratt and Zechhauser eds., Principals and Agents: The Structure of Business. Cambridge: Harvard Business School Press.

Coase, R. H.,[1937] "The Nature of the Firm," Economica, New Series, Vol.IV. pp.386-405.

Coase, R. H., [1964] "Comment," American Economic Review, May.

Coase, R. H. [1988] The Market, the Firm, and the Law. Chicago: The University of Chicago Press.

Demsetz, Harold [1969] "Information and Efficiency: Another Viewpoint," Journal of Law and Economics, 12(April), pp. 1-22.

Dore, Donald [1983] "Goodwill and the Spirit of Market Capitalism," The British Journal of Sociology, 34(4), pp. 459-482.

Dore, Donald [1992] "Japan's Version of Managerial Capitalism," in Kochan, T. A. & Useem M. eds., Transforming Organizations, pp. 17-26. Oxford: Oxford University Press.

Easterbrook, Frank H. and Daniel R. Fischel, [1990], "The Corporate Contract," Lucian Arye Bebchuk ed., Corporate Law and Economic Analysis. Cambridge: Cambridge University Press.

Economic Planning Agency [Keizai Kikaku-cho], Keizai Hakusho [Economic White Paper], annual. Tokyo: Ministry of Finance.

Fair Trade Commission [Kosei Toriki Iinkai] [1983], Kosei Torihiki Iinkai Shinketsu Shu (28), Sekiyu Karuteru Jiken Kankei Tokyo Kosai Hanketsu [Decisions of the Fair Trade Commission (28):TokyoHigh Court Decisions on the Petroleum Cartel Case]. Tokyo: Fair Trade Commission.

Fair Trade Commission [Kosei Torihiki Iinkai] [1986] Wagakuni ni okeru Keizairyoku Shuchu no Jittai ni tsuite [A Survey of Concentration of Economic Power in Japan], 16 September.

Fair Trade Commission [Kosei Torihiki Iinkai] [1992] The Outline of the Report on the Actual Conditions of the Six Major Corporate Groups, February.

Financial System Research Council [Kin'yu Seido Chosa-kai] [1969] Kin'yu Seido Chosa-kai Shiryo [Documents and Materials for the Financial System Research Council], Vol. 2. Tokyo: Kin'yu Zaisei Kenkyu-kai.

Financial System Research Council [Kin'yu Seido Chosa-kai] [1970] Kin'yu Seido Chosa-kai Shiryo [Documents and Materials for the Financial System Research Council], Supplement. Tokyo: Kin'yu Zaisei Kenkyu-kai.

Foster, C.D., [1992] Privatization, Public Ownership and the Regulation of Natural Monopoly, Blackwell.

Friedman, David [1988] The Misunderstood Miracle. Ithaca: Cornell University Press.

Fukukawa, Shinji [1964] "Seifu Kin'yu Kikan no Kino to Sangyo Seisaku [The Function of Government Financial Institutions and Industrial Policy]," Tsusho Sangyo Kenkyu (MITI), No.122.

Futatsugi, Yusaku [1977] "Miyazaki Yoshikazu-cho Sengo Nihon no Kigyo Shudan [Professor Miyazaki's Corporate Groups in the Postwar Japan]," Economic Studies Quarterly, Vol. 28, No. 1.

Gordon, Jefferey N., [1990] "Ties and Bond: Dual Class Common Stock and the Problem of Shareholder Choice," in Lucian Arye Bebchuk ed., Corporate Law and Economic Analysis. Cambridge: Cambridge University Press.

Gordon, Robert Aaron, [1945] Business Leadership in the Large Corporation. Washington: The Brookings Institution.

Goto, Akira [1975] "Daikigyo Taisei to Kin'yu Keiretsu [Dominance of Large Firms and Kin'yu Keiretsu]" Quarterly Chuo Koron, fall.

Goto, Akira [1983] "Nihon no Kigyo Shudan [Corporate Groups in Japan]," Bijinesu Rebyu (Hitotsubashi University), Vol.30, No.3,4.

Goto, Akira and Wakazugi Ryuhei [1988] "Technology Policy," in Komiya et als. eds., [1988].

Granovetter, Mark [1992] "Problems of Explanation in Economic Sociology," in Nitin Nohria et al., eds., Networks and Organizations: Structure, Form, and Action, pp. 25-56. Cambridge: Harvard Business School Press.

Hannah, Leslie [1983] The Rise of the Corporate Economy, 2nd. London: Methuen.

Harada, Naohiko [1983] "Gyosei Shido - Ho no Shihai to Nihonteki Gyosei Taishitsu [Administrative Guidance: Judicial Control and Characteristics of Japan's Administration]," Jurisuto Sogo Tokushu (special issue), No.29.

Hart, Oliver, [1989] "An Economist's Perspective on the Theory of the Firm," Columbia Law Review, November, pp.1957-74.

Hayek, F. A. [1945] "The Use of Knowledge in Society," American Economic Review, September.

Hazama, Hiroshi, [1989] Keiei Shakai-gaku [Sociology of Management]. Tokyo: Yuhi-kaku.

Horiuchi, Akiyoshi [1989] "Informational Properties of the Japanese Financial System," Japan and the World Economy, Vol.1, No.3. pp.255-78.

Horrigan, J.O., [1968], "A Short History of Financial Ratio Analysis," The Accounting Review, April.

Hoshi, Takeo, Anil Kashyap, and David Scharfstein, [1990] "Bank Monitoring and Investment: Evidence from the Changing Structure of Japanese Corporate Banking Relationships," in R. Glenn Hubbard, ed., Asymmetric Information, Corporate Finance, and Investment, pp.105-26, Chicago: The University of Chicago Press.

Hoshi, Takeo, Anil Kashyap, and David Scharfstein, [1991] "Corporate Structure, Liquidity, and Investment: Evidence from Japanese Industrial Groups," Quarterly Journal of Economics, Feb. 1991, pp.33-60.

Imai, Ken'ichi [1976] Gendai Sangyo Soshiki [Contemporary Industrial Organization]. Tokyo: Iwanami Shoten.

Imai, Ken'ichi [1989] "Kigyo Gurupu [Corporate Groups]," in Imai et al eds., Nihon no Kigyo [Japanese Firms]. Tokyo: University of Tokyo Press.

Imai, Ken'ichi [1990] Joho Nettowaku Shakai no Tenkai [The Information Network Society 1990. Tokyo: Chikuma Shobo.

Imai, Ken'ichi [1992] Shihon-Syugi no System kan Kyoso [Competition Among Different Systems in Capitalism]. Tokyo: Chikuma Shobo.

Isobe, Koichi [1964] "Jidosha Sangyo ni okeru Keiretsu [Keiretsu in the Automobile Industry]," Chusho Kigyo Kin'yu Koko Chosa Jiho, 6-3.

Itoh, Taikichi [1985],"Hashigaki [Foreword]," in Nihon Chusho Kigyo Gakkai ed. Shitauke, Ryutsu Keiretsu-ka to Chusho Kigyo [Subcontracting, Distribution Keiretsu and Small Business]. Tokyo: Doyukan.

Jenkinson, Tim and Colin Mayer, [1993] "The Assessment: Corporate Governance and Corporate Control," Oxford Review of Economic Policy, Vol.8, No.3, pp.1-10.

Jensen, Michael C. and William H. Mechling [1976] "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," Journal of Financial Economics, pp.305-60.

Johnson, Charmers [1982] MITI and The Japanese Miracle.Stanford:Stanford University Press.

Kahn, Alfred, [1988] The Economics of Regulation: Principles and Institutions, The MIT Press.

Kaizuka, Keimei [1973] Keizai Seisaku no Kadai [Basic Issues on Economic Policy]. Tokyo: University of Tokyo Press.

Kaplan, Steven N., and Bernadett A. Minton [1993] "'Outside' Intervention in Japanese Companies: Its Determinants and Its Implications for Managers," NBER Working Paper No. 4276.

Kawaguchi, Hiroshi [1962a] "Futatsu no Nihon Keizai-ron [Two Views of the Japanese Economy]," in Hiroshi Kawaguchi ed. Nihon Keizai no Kiso Kozo [The Basic Structure of the Japanese Economy]. Tokyo: Shunju-sha.

Kawaguchi, Hiroshi [1965] "Chusho Kigyo heno Kin'yu-teki 'Shiwayose' Kiko [Financial Burden-Shifting Mechanism toward Small Business]," in Tachi, Ryuichiro and Tsunehiko Watanabe eds. Keizai Seicho to Zaisei Kin'yu [Economic Growth and Budget and Finance]. Tokyo: Iwanami Shoten.

Kawaguchi, Hiroshi [1966] Nihon no Kin'yu - Yushi Shuchu Mekanizumu [Finance in Japan - The Loan Concentration Mechanism]. Tokyo: Nihon Hyoron-sha.

Kawaguchi, Hiroshi [1974b] "Shin Kyokumen-ka no Kashite Karite no Niju Kozo Bunseki [A Study of the Dual Structure in the New Phase of Lender-Borrower Relations]," Weekly Toyo Keizai Rinji Zokan (special issue), 8 February.

Kawaguchi, Hiroshi [1979] Gensoku Seicho-ka no Kin'yu Kikan [Financial Institutions in the Slow Growth era], Vol. 1, 2. Tokyo: Nihon Keizai Hyoron-sha.

Kawasaki, Hirotaro [1966] "Gyosei Shido no Jittai [The Reality of Administrative Guidance]," Jurisuto, No. 342., 15 March.

Kawasaki, Tsutomu [1968] Sengo Tekko-gyo Ron [The Postwar Steel Industry]. Tokyo: Tekko Shimbun-sha.

Kiyonari, Tadao [1973] "Niju Kozo-ron no Sai Ginmi [A Reexamination of the Dual Structure View]," Shoko Kin'yu, November.

Kobayashi, Yoshihiro [1980] Kigyo Shudan no Bunseki [An Analysis of Corporate Groups], Hokkaido University Press.

Kochan, Thomas A., and Michael Useem [1992] "Achieving Systemic Organizational Change," in Thomas A. Kochan et al eds., Transforming Organizations. Oxford: Oxford University Press.

Kojima, Seiichi [1960] "Tekko-gyo no Jishu Chosei Hoshiki wo dou Kaizo subekika [How Should We Change the Self Coordination of Investment in the Steel Industry?]" Tekko-kai, March.

Komiya, Ryutaro [1961a] "Dokusen Shihon to Shotoku Saibunpai [Monopoly Capital and Income Redistribution]," Sekai, March.

Komiya, Ryutaro [1961b] "Dokusen Shihon to Shotoku Bunpai to Shakai Kozo [Monopoly, Income Distribution, and Social Structure]," Ekonomisuto, 5 September.

Komiya, Ryutaro [1962] "Nihon ni okeru Dokusen to Kigyo Rijun [Monopoly and Corporate Profit in Japan]," in Tsunejiro Nakamura et als. eds., Kigyo Keizai Bunseki [Study of Corporate Economy]. Tokyo: Iwanami Shoten.

Komiya, Ryutaro [1970] "Gendai Shihon Shugi no Tenkai [The Development of Contemporary Capitalism]," Ekonomisuto, 10 November.

Komiya, Ryutaro, [1975] Gendai Nihon Keizai Kenkyu [Studies of Contemporary Japanese Economy]. Tokyo: University of Tokyo Press.

Komiya, Ryutaro, [1988] "Introduction," in Komiya et als eds., [1988].

Komiya, Ryutaro, [1990] The Japanese Economy: Trade, Industry, and Government. Tokyo: University of Tokyo Press.

Komiya, Ryutaro [1993] Japan's Comparative Advantage in the Machinery Industry: Industrial Organization and Technological Progress: A Jean Monnet Chair Lecture, March. Firenze: European University Institute.

Komiya, Ryutaro, Masahiro Okuno and Kotaro Suzumura eds., [1988] Industrial Policy of Japan. Tokyo: Academic Press.

Kosai, Yutaka, Noriyuki Makiguchi, Shigeki Koyama and Michio Ogino [1964] "Shikin Haibun Mekanizumu no Kento [An Analysis of Credit Allocation Mechanism]," Keizai Geppo (Economic Planning Agency), July.

Kosai, Yutaka and Yoshitaro Ogino [1980] Nihon Keizai Tembo [The Contemporary Japanese Economy]. Tokyo: Nihon Hyoron-sha.

Koto, Rikuzo [1963] "Sangyo Tosei Zo - Sangyo-kai kara no Ichi Teigen [An Image of the Industry Control: A Proposal from the Industry]," in Yoshito Chigusa ed., Sangyo Taisei no Sai Hensei [Reorganization of the Industrial System]. Tokyo: Syunju-sha.

Kreps, David [1989] "Corporate Culture and Economic Theory," in Alt and Shepsle eds., Rational Perspective in Political Science. Cambridge: Harvard University Press.

Krugman, Paul [1994] "Competitiveness: a Dangerous Obsession," Foreign Affairs, 73(2), 28-44.

Kurasawa, Motonari [1977] "Sen'i Sangyo ni okeru Chusho Kigyo Seisaku [Policies for Small Business in the Textile Industry]" Kokumin Kin'yu Koko Chosa Geppo, January.

Kurasawa, Motonari [1978] "Chusho Kigyo Kin'yu ni okeru Kigyo Kibokan Kakusa ni tsuite [Discrimination against Small Business in Finance]," Shoko Kin'yu, January.

Kurasono, Susumu [1960] "Chusho Kigyo Kin'yu [Financing Small Business]," in Kajinishi Mitsuhaya, Yoshio Kobayashi, Hirosumi Iwao, and Taikichi Itoh eds. Dokusen Shihon to Chusho Kigyo [Monopoly Capital and Small Business]. Tokyo: Yuhi-kaku.

Kyogoku, Jun'ichi [1983] Nihon no Seiji [Japan's Politics]. Tokyo: Univ. of Tokyo Press.

Lawrence, Robert Z.,[1991a] "Do Keiretsu Reduce Japanese Imports?" Paper prepared for the Japanese Economic Planning Agency's Conference on External Adjustments and the Changing Trade Structure of Manufactured Goods Since 1985, Tokyo, January.

Lawrence, Robert Z.,[1991b] "Efficient or Exclusionist? The Import Behavior of Japanese Corporate Groups," Brooking Papers on Economic Activity, 1, pp.311-341.

Lev, Baruch,[1974] Financial Statement Analysis, Prentice-Hall.

Macaulay, Stewart [1963] "Non-contractual Relation in Business: a Prelimi nary study," American Sociological Review, 28, pp. 55-67.

Mace, Myles L. [1976] Directors: Myth and Reality. Cambridge: Harvard Business School Press.

Mace, Myles L. [1979] "Directors: Myth and Reality -- Ten Years Later," Rutgers Law Review, 32(2), pp. 293-308.

Maddison, Angus, [1991], Dynamic Forces in Capitalist Development. Oxford: Oxford University Press.

Management and Coordination Agency [Sohmu-cho] Jigyosho Tokei Chosa [Census of Establishments], every 3 year. Tokyo: Management and Coordination Agency.

March, James G. & Simon, Herbert A. [1958] Organizations. New York: John Wiley & Sons.

Matsui, Toshiya [1985] "Jidosha Sangyo ni okeru Gaichu Kanri Seisaku [Purch ase Control Measures in the Automobile Industry]," Ritsumeikan Keieigaku, Vol. 24, No. 2.

Milgrom, Paul & John Roberts [1992] Economics, Organizations and Management. Englewood Cliffs: Prentice-Hall.

Ministry of Finance [Okura-sho], Hojin Kigyo Tokei Nenpo [Financial Statement of Incorporated Business], annual. Tokyo: Ministry of Finance.

Ministry of International Trade and Industry [Tsusho Sangyo-sho], Kogyo Tokei-hyo [Census of Manufacturers], annual. Tokyo: MITI.

Ministry of International Trade and Industry [Tsusho Sangyo-sho] [1969] Tsusho Sangyo-sho 20 Nen-shi [Twenty Years of Ministry of International Trade and Industry]. Tokyo: Ministry of International Trade and Industry.

Mitsubishi Keizai Kenkyu-jo [1965] Buhin Mehka Senmon-ka no Jittai Bunseki [Study of Specialization among Car Parts Manufacturers]. Tokyo: Mitsubishi Keizai Kenkyu-jo.

Miyazaki, Yoshikazu [1962] "Kato Kyoso no Ronri to Genjitsu - Keiretsu Shihaikiko no Kaimei [The Logic and Reality of Excessive Competition: A Study of Keiretsu Control Mechanism]," Ekonomisuto, 10 October.

Miyazaki, Yoshikazu [1972] Kasen - Gendai no Keizai Kiko [Oligopoly: The Structure of Contemporary Economy]. Tokyo: Iwanami Shoten.

Miyazaki, Yoshikazu [1976] Sengo Nihon no Kigyo Shudan [Corporate Groups in the Postwar Japan]. Tokyo: Nihon Keizai Shimbun-sha.

Miyazaki, Yoshikazu [1979] "'Keieisha Shihai' Saiko [Reexamination of Manager Control], Keizai Kenkyu (Hitotsubashi University), Vol. 30, No. 3.

Miyazaki, Yoshikazu [1980] "Kigyo Shudan Bunseki ni tsuite [On the Study of Corporate Groups]," in Tsuneo Mori et al. eds., Gendai Shihon Shugi [Contemporary Capitalism]. Tokyo: Nihon Hyoron-sha.

Miyazawa, Ken'ichi and Hirotaka Kato [1965] "Karite no Niju Kozo [Dual Structure among Borrowers]," in Kawaguchi, Hiroshi and Ichiro Kawai eds., Kin'yu-ron Koza [Lectures on Finance] Vol.5. Tokyo: Yuhi-kaku.

Miwa, Yoshiro [1976] "Shin Sangyo no Mebae [An Emergence of New Industries], in Hiromi Arisawa ed., Showa Keizai-shi [Showa Economic History]. Tokyo: Nihon Keizai Shimbun-sha.

Miwa, Yoshiro [1990a] Nihon no Kigyo to Sangyo Soshiki [Firms and Industrial Organization in Japan]. Tokyo: University of Tokyo Press.

Miwa, Yoshiro [1990b] "Book Review of Saxonhouse and Yamamura, eds, Law and Trade Issues of the Japanese Economy," Journal of the Japanese and InternationalEconomies, 4, pp. 93-5.

Miwa, Yoshiro [1991] "Mein Banku to Nihon no Shihon Shijo [Mainbanks and Japanese Capital Markets]" Kin'yu, Aug. pp.11-19.

Miwa, Yoshiro [1993a] Kin'yu Gyosei Kaikaku [Financial Administration Reform] Tokyo: Nihon Keizai Shimbun-sha.

Miwa, Yoshiro [1993b] "Economic Effects of the Antimonopoly and the Deconcentration Policies in Postwar Japan," in Juro Teranishi et al., eds., The Japanese Experience of Economic Reforms. London: Macmillan.

Miwa, Yoshiro [1993c] "Policies for Small Business in Japan," Economic Development Institute of the World Bank Working Paper, Number 93-39.

Miwa, Yoshiro [1994] The Retail Market for Wool Products: the Case of Men's Suits in Japan," in Findlay, Christopher & Itoh M. eds., Wool in Japan, pp. 29-43. Pymble: Harper Educational.

Morita, Minoru [1960] "Chusho Kigyo no Kin'yu to Zaisei [Finance and Budget for Small Business]," in Chusho Kigyo Chosa-kai, Chusho Kigyo no Tokei Bunseki [A Statistical Analysis of Small Business]. Tokyo: Toyo Keizai Shimpo-sha.

Morozumi, Yoshihiko [1966] Sangyo Seisaku no Riron [Theory of Industrial Policy]. Tokyo: Nihon Keizai Shimbun-sha.

Mutoh, Hiromichi, [1988] "The Automotive Industry," in Komiya et als. eds., [1988].

Nakakita, Toru [1993] "Trade and Capital Liberalization Policies in Postwar Japan," in Juro Teranishi et al., eds., The Japanese Experience of Economic Reforms, pp. 331-365. London: Macmillan.

Nakamura, Hideichiro [1964a] Chuken Kigyo-ron [Medium-sized Vital Enterprises]. Tokyo: Toyo Keizai Shimpo-sha.

Nakamura, Hideichiro [1975] "'Miyazaki Yoshikazu' Taikei ni tsuite [A Critical Review of the Argument of Professor Yoshikazu Miyazaki]," Kokumin Keizai, No.134.

Nakamura, Hideichiro [1981] "Henbo suru Shitauke-sei [Changing Subcontracting System]," in Hideichiro Nakamura et als. eds., Gendai Chusho Kigyo-shi [The History of Small Business in Contemporary Japan]. Tokyo: Nihon keizai Shimbun-sha.

Nakamura, Hideichiro [1985] Chosen suru Chusho Kigyo [Challenging Small Business]. Tokyo: Iwanami Shoten.

Nakamura, Hideichiro, Hajime Yamashita and Kimihiro Masamura eds. [1971] Gendai no Kagaku Kogyo - Kozo to Dotai [Modern Chemical Industry: Structure and Dynamics]. Tokyo: Toyo Keizai Shimpo-sha.

Nakamura, Koji [1979] "Kohaba Orimono Senshoku Kako Kogyo no Sanchi Hikaku Bunseki Shiron [A Comparative Study of Sanchi in the Kohaba Dyeing Industry]," Shakai Kagaku (Doshisha University), No. 25, pp. 63-124.

Nakamura, Koji [1993] "Sen'i Risosu Senta Koso to Kyoto Senshoku-gyo [The Conception of Textile Resource Center and Kyoto Dyeing Industry]," Shakai Kagaku (Doshisha University), No. 50, pp. 101-132.

Nakamura, Takafusa,[1981] The Post War Japanese Economy. Tokyo: University of Tokyo Press.

Nakamura, Takafusa,[1993] Nihon Keizai [The Japanese Economy], 3rd. Tokyo: University of Tokyo Press.

Nakatani, Iwao, [1984] "The Economic Role of Financial Corporate Grouping," in Aoki, Masahiko ed. The Economic Analysis of the Japanese Firm, North Holland.

Nakayama, Tokutaro [1948] Chusho Kigyo no Honshitsu to Tenkai - Kokumin Keizai Kozo no Mujun no ichi Kenkyu [The Nature and Development of Small Manufacturing: An Investigation of Conflict in the Structure of the National Economy]. Tokyo: Yuhi-kaku.

Negishi, Akira [1975] "Shijo Sannyu ni taisuru Kyoso Seigenteki Gyosei Kainyu [Anti-Competitive Government Intervention against Market Entry]," Jurisuto, No.592, 15 July.

Negishi, Akira [1977] "Sangyo Gyosei to Gyosei Shido [Administration toward Industry and Administrative Guidance]," Jurisuto, No.628, 1 January.

Nihon Keizai Chosa Kyogi-kai [1971] Seifu-kei Kin'yu Kikan no Saihensei [Reorganization of Government Affiliated Financial Institutions]. Tokyo: Ginko Tsushin-sha.

Nihon Keizai Shimbun [1963] "Gekido suru Shitauke Kojo [Rapidly Changing Subcontracting Plants], No. 1- 32," Nihon Keizai Shimbun, July-August.

Nishiyama, Tadanori [1975] Gendai Kigyo no Shihai Kozo [Control Structure in Contemporary Enterprises]. Tokyo: Yuhi-kaku.

Noda, Kazuo [1963] "Sengo Nihon no Keieisha [Managers in Postwar Japan]," in Ryutaro Komiya ed. Sengo Nihon no Keizai Seicho [Economic Growth in Postwar Japan]. Tokyo: Iwanami Shoten.

Noguchi, Yukio [1993] "The Role of the Fiscal Investment and Loan Program in Postwar Japanese Economic Growth." Economic Development Institute of the World Bank Working Paper, No. 93-34.

Nohria, Nitin [1992] "Is a Network Perspective a Useful Way of Studying Organizations?" in Nitin Nohria & Eccles, R. G. eds., Networks and Organizations: Structure, Form, and Action, pp. 1-22. Cambridge: Harvard Business School Press.

Odagiri, Hiroyuki, [1992] Growth Through Competition, Competition through Growth, Oxford University Press.

Ohshima, Taku ed. [1987] Gendai Nihon no Jidosha Buhin Kogyo [Car Parts Industry in Contemporary Japan]. Tokyo: Nihon Keizai Hyoron-sha.

Patrick, Hugh [1977] "The Future of the Japanese Economy: Output and labor Productivity," The Journal of Japanese Studies, 3.

Patrick, Hugh T. and Thomas P. Rohlen,[1987] "Small-Scale Family Enterprises," in Kozo Yamamura and Yasuba Yasukichi eds., The Political Economy of Japan: Volume 1. The Domestic Transformation. Stanford: Stanford University Press.

Pempel, T. J., and Michio Muramatsu [1993] "The Japanese Bureaucracy and Economic Development: Structuring a Proactive Civil Service." Economic Development Institute of the World Bank Working Paper, No. 93-26.

Posner, Richard A. [1969] "Natural Monopoly and its Regulation," Stanford Law Review, February.

Ramseyer, J. Mark, [1991], "Legal Rules in Repeated Deals: Banking in the Shadow of Defection in Japan," Journal of Legal Studies, Jan. pp.91-117.

Ramseyer, J. Mark, [1993], "Columbian Cartel Launches Bid for Japanese Firms," The Yale Law Journal, June, pp.2005-20.

Sato, Yoshio [1974] "Kasen Taisei to Chusho Kigyo - Aratana 'Niju Kozo' heno Mondai Shiten [Oligopoly System and Small Business - A Critical Examination of Revived Dual Structure," Shoko Kin'yu, July.

Sato, Yoshio [1986] "Nihon-gata Shitauke Seisan Shisutemu no Kiseki to Toutatsu Ten [The History of the Formation Process of the Japanese Style Subcontracting Production System]," Mita Shogaku Kenkyu (Keio Univeristy), Vol. 29, No. 2.

Scherer, F.M. and David Ross, [1990] Industrial Market Structure and Industrial Performance, Third edition. Boston: Houghton Mifflin Company.

Sei, Koichiro, Hiroki Ohmori, and Haruhiko Nakajima [1975] "Jidosha Buhin Kogyo ni okeru Seisan Kozo no Kenkyu [A Study of Production Structure in the Car Parts Industry] (1)," Kikai Keizai Kenkyu, No.8.

Sheard, Paul, [1989] "The Main Bank System and Corporate Monitoring and Control in Japan," Journal of Economic Behavior and Organization,

Shin Nippon Seitetsu [Nippon Steel Corporation] [1970] Soshu Eigyo Junpo 2 - Shikyo Hen II [Ten-Day Report on Operations 2: Market Conditions II]. Tokyo: Nippon Steel Co.

Shinohara, Miyohei, [1959], "Nihon Keizai no Niju Kozo [The Dual Structure of Japanese Economy]," in Shinohara ed., Sangyo Kozo [Industrial Structure]. Tokyo: Syunju-sha.

Shinohara, Miyohei, [1961], Nihon Keizai no Seicho to Junkan [Growth and Trade Cycle in the Japanese Economy]. Tokyo: Sobun-sha.

Shinohara, Miyohei, [1968], "A Survey of the Japanese Literature on Small Industry," in Bert F. Hoselitz ed. The Role of Small Industry in the Process of Economic Growth. The Hague: MOUTON.

Shinohara, Miyohei [1976] Sangyo Kozo-ron [Industrial Structure]. Tokyo: Chikuma Shobo.

Shiomi, Haruhito [1985] "Seisan Rojisutikkusu no Kozo - Toyota Jidosha no Kesu [The Structure of Production Logistics: The case of Toyota Motors]," in Kazuichi Sakamoto ed. Gijutsu Kakushin to Kigyo Kozo [Technical Innovation and Enterprise Structure. Tokyo: Mineruba Shobo.

Simon, Herbert A. [1976] Administrative Behavior: A Study of Decision-Making Processes in Administrative Organization, 3rd., Macmillan.

Simon, Herbert A. [1991], "Organizations and Markets," Journal of Economic Perspectives, Spring, pp.25-44.

Solow, Robert M.[1980], "On Theories of Unemployment," American Economic Review, March, pp.1-11.

Stern, Louis W. & Adel I. El-Ansary [1988] Marketing Channels, 3rd. Englewood Cliffs: Prentice Hall.

Stigler, George J. [1975] The Citizen and the State. Chicago: The University of Chicago Press.

Stigler, George J., and Claire Friedland [1962] "What Can Regulators Regulate? The Case of Electricity," The Journal of Law and Economics, October.

Sugioka, Sekio [1965] "Kato Kyoso no Mekanizumu - Miyazaki 'Wannsetto' Riron heno Gimon [A Mechanism of Excessive Competition - A Critic of One-Set View of Professor Miyazaki]," Ekonomisuto, 23 February.

Sumiya, Mikio [1970] "Reisai Keiei no Keizai Riron [An Economic Theory of Petty Enterprise Management] (1)," Keizaigaku Ronsyu (University of Tokyo), Vol. 36, No. 2.

Suzuki, Atsuyuki [1976] "Eidai Sangyo Tosan - Ginko Kanri no Hatan [Bankruptcy of Eidai Corporation - A Collapse of a Bank Managed Firm," Ekonomisuto, 7 March.

Suzuki, Yoshio [1983] Nihon Kin'yu Keizai-ron [The Japanese Financial Economy]. Tokyo: Toyo Keizai Shimpo-sha.

Tachibana, Akimasa [1966] "Sumikin Mondai kara mita korekarano Nihon Keizai [The Japanese Economy Viewed through the Sumikin Incident]," Kosei Torihiki (FTC), February.

Takada, Hiroshi [1980] "Sengo no Nihon Keizai to Chusho Kigyo Kin'yu [The Postwar Japanese Economy and Small Business Finance]," Keizai, August.

Takahashi, Takeo [1982] "Nihon Keizai Shin Niju Kozo-ron [The New Dual Structure of the Japanese Economy]," Ekonomisuto, 18 May.

Takeishi, Akira, Koichiro Sei, and Takahiro Fujimoto [1993] "Nihon Jidosya Sangyo no Sapuraiya Sisutemu no Zentaizo to sono Tamensei [(The Total View of Suppliers System in the Japanese Automobile Industry and its Many-sided Character," Discussion Paper, 93-J-5. Tokyo: University of Tokyo.

Takeshita, Shozo [1967] "Mizushima Chiku Jidosha Buhin Kogyo no Doko to Mondaiten [Facts and Problems of Car Parts Manufacturers in Mizushima District], in 1967 API Yearbook.

Takizawa, Kikutaro [1966] "Kozo Hendo Katei ni okeru Chusho Kikai Kogyo no Sonritsu Kiban [The Basis of Small Machining Firms in the Process of Structural Change]," Chusho Kigyo Kin'yu Koko Chosa Jiho, 7-4.

Takizawa, Kikutaro [1985a] "Jo [Foreword]," in Chusho Kigyo Jigyo-dan et al. eds., [1985].

Takizawa, Kikutaro [1985b] "'Honshitsu-ron' teki Kenkyu [Study of the 'Substance']," in Chusho Kigyo Jigyo-dan et al., eds., [1985].

Tanaka, Minoru [1965] Nihon no Sen'i Sangyo [Japanese Textile Industry]. Tokyo: Shisei-Do.

Tanaka, Naoki [1980] "Sangyo Seisaku no Minaoshi to Gyosei Kaikaku [Reexamination of Industrial Policy and Administrative Reform]," Keizai Hyoron, November.

Tanaka, Yohnosuke [1975] Hyuga Hosai-ron [Hyuga Hosai]. Tokyo: Raifu-sha.

Tanida, Shozo [1980] "Gendai Nihon no Kin'yu Shihon to Ginko Shihon [Financial Capital and Bank Capital in Contemporary Japan], Keizai, February.

Teranishi, Juro [1974], "Yushi Shuchu to Shin'yo Wariate, Shin'yo Seigen [Loan-Concentration, Credit Rationing, and Credit Limit]," Weekly Toyo-Keizai Rinji Zokan (special issue), 8 February.

Teranishi, Juro, [1975], "Choki Shikin Shijo to Tanki Shikin Shijo [Long Term Funds Market and Short Term Funds Market]," Kikan Gendai Keizai, No.17.

Teranishi, Juro, [1982], Nihon no Keizai Hatten to Kin'yu [Economic Development and Finance in Japan]. Tokyo: Iwanami-Shoten.

Thurow, Lester C. [1992] "Foreword," in Thomas A. Kochan & Useem, M. eds., Transforming Organizations, v-vi. Oxford: Oxford University Press.

Tirole, Jean [1988], The Theory of Industrial Organization, MIT Press.

Toyoda, Eiji [1987] Toyota: Fifty Years in Motion. Tokyo: Kodansha International.

Toyota [1989] A History of the First 50 Years. Toyota City: Toyota Motor Corporation [privately published].

Trevor, Malcom [1988] Toshiba's New British Company. London: Policy Studies Institute.

Tsuruta, Toshimasa [1976] "Jiyuka Taisaku no Konran [Confusions in Liberalization Measures]," in Hiromi Arisawa ed., Showa Keizai-shi [Showa Economic History]. Tokyo: Nihon Keizai Shimbun-sha.

Tsuruta, Toshimasa [1988] "The Rapid Growth Era," in Komiya et als. eds., [1988].

Uekusa, Masu [1982] Sangyo Soshiki-ron [Industrial Organization]. Tokyo: Chikuma Shobo.

Ueno, Hiroya [1978] Nihon no Keizai Seido [Economic Institutions of Japan]. Tokyo: Toyo Keizai Shimpo-sha.

Ueno, Hiroya, and Hiromichi Mutoh [1968] "Byojo Akka Ichijirushii Beikoku Tekkogyo no Genjitsu [The Reality of U.S. Steel Industry in a Serious Sick]," Weekly Toyo Keizai Rinji Zokan (special issue), 11 December.

Ueno, Hiroya, and Hiromichi Mutoh [1973] "Jidosya Sangyo [Automobile Industry," in Kumagai, Hisao ed. Nihon no Sangyo Soshiki [Japan's Industrial Organization] Vol.1. Tokyo: Chuo Koron-sha.

U. S. Department of Commerce [1972] Japan: The Government-Business Relationships, A Guide for the American Businessman. Washington: Government Printing Office.

Vickers, John and George Yarrow [1988] Privatization: An Economic Analysis, The MIT Press.

Wada, Kazuo [1984] "'Jun Suichoku-teki Togo Sosiki' no Keisei - Toyota no Jirei [A Formation of Quasi-Vertically Integrated Organization: The Case of Toyota]," Akademia (Nanzan University), No. 83.

Wada, Kazuo [1991]"The Development of Tiered Inter-firm Relationships in the Automobile Industry: A Case Study of the Toyota Motor Corporation," Japanese Yearbook on Business History, Volume 8. pp.23-47.

Wallich, Henry C. and Mable I. Wallich, [1976] "Banking and Finance," in Hugh Patrick and Henry Rosovsky eds., Asia's New Giant, pp. 249-315. Washington: Brooking Institution.

Watanabe, Yukio [1985] "Shitauke, Keiretsu Chusho Kigyo [Small Business in Subcontracting- and Keiretsu-Relationship," in Chusho Kigyo Jigyo-dan et al eds., [1985].

Williamson, Oliver E. [1964] The Economics of Discretionary Behavior: Managerial Objectives in a Theory of the Firm. Englewood Cliffs: Prentice-Hall.

Williamson, Oliver E. [1975] Markets and Hierarchies. New York: Free Press.

Williamson, Oliver E. [1983] "Credible Commitments: Using Hostage to Support Exchange," American Economic Review, September, pp. 519-40.

Williamson, Oliver E., [1991] "Comparative Economic Organization: The Analysis of Discrete Structural Alternatives," Administrative Science Quarterly, June, pp.269-296.

Yamashita, Kunio [1969] "Chusho Kigyo Kin'yu no Tokushitsu to Kozo [Characteristics and Structure of Small Business Finance]," in Akira

Koizumi and Nagasawa Koreyasu eds., Kin'yu-ron no Kihon Mondai [Basic Issues in Finance]. Tokyo: Toyo Keizai Shimpo-sha.

Yamashita, Kunio [1985] "Chusho Kigyo to Kin'yu, Zaisei, Zaimu [Finance, Budget, and Corporate Finance for Small Business]," in Chusho Kigyo Jigyo-dan et al., eds., [1985].

Yamawaki, Hideki [1988] "The Steel Industry," in Komiya et als. eds., [1988].

Yanagida, Yukio, Daniel Foote, Mark Ramseyer, Hugh Scogin, and Edward Johnson, [1994] Law and Investment in Japan: Cases and Materials. Cambridge: Harvard Law School.

Yokokura, Tokashi, [1988] "Small and Medium Enterprises," in Komiya et als. eds., [1988].

Yoshino, M. Yotaro, [1968] Japan's Managerial System, The MIT Press.

Yoshitani, Izumi,[1976], "Gyosya Undo to Seiji no Sasshin [Political Movement of Business Firms and Political Reform" in Seiji Keizai Kenkyu-sho, ed., Tenkanki no Chusho Kigyo Mondai [Small Business ata Turning Point]. Tokyo: Shinhyoron.

Zadan-kai (Symposia: Ichiro Ogawa, Yoshio Kanazawa, Yoriaki Narita,Kinzo Matsuo, Tohru Yazawa, and Kazuo Yamauchi) [1966] "Gyosei Shido no Kihon Mondai [Basic Issues on Administrative Guidance]," Jurisuto, No. 342, 15 March.