Business and Economic History
On-Line
Vol. 5 2007

Nissan's *Keiretsu*, 1956-1970

Evelyn Anderson

Because Toyota symbolizes the miraculous success of the Japanese automobile industry as a whole, scholars have thoroughly documented the nature of Toyota's business strategy and its *keiretsu*.[1] In contrast, literature exploring the nature of Nissan's *keiretsu* and its business strategy was almost non-existent in the 1990s. The assumption was that the two *keiretsu* were identical, with similar characteristics, differences being a matter of degree.[2] In this paper, I argue that the Provisional Act for the Promotion of the Machinery Industry (the Provisional Act or *Kishinho*), 1956-1970, enacted by the Ministry of International Trade and Industry (MITI), provided Nissan with incentives to vertically integrate some of its most important *keiretsu* firms; during these fifteen years, Nissan adopted hierarchy. I document how the Nissan *keiretsu* evolved in the period coinciding with the Provisional Act and how it differed from the Toyota *keiretsu*. Toyota's inter-firm relationship with its core *keiretsu* members was built on trust and organizational capability, whereas Nissan's initial postwar strategy was similar to Toyota's only in name. Contrary to common belief, Nissan's governance in this period was driven by transaction cost considerations in the absence of trust.

[1] Yoshiro Miwa, "Shitauke Kankei: Jidousha Sangyou" [Subcontracting Relationship: Automobile Industry], in *Nihon no kigyou* [Japanese Corporations], ed. Kenji Imai and Ryu Komiya (Tokyo, 1989), 163-86; James P. Womack, Daniel T. Jones, and Daniel Roos, *The Machine That Changed the World* (New York, 1990); Kazuo Wada, "Jidousha sangyou ni okeru kaisouteki kigyou kankei no keisei: Toyota Jidousha no jirei [The Formation of a Vertical Relationship in the Automobile Industry: Toyota as a Case Study],"*Keiei Shigaku* [Japan Business History Review] 26, no. 2 (1991): 1-27.

[2] As Kazuo Wada wrote, "Why focus on Toyota? Because it is the largest assembler in Japan, and it is reputed to have maintained the best relations with its suppliers, and in the most effective manner. By taking up the case of a trendsetter (thus, an extreme) company instead of an average (in that sense, typical) one, I thought I could put the problem into sharper relief." See Kazuo Wada, "The Development of Tiered Inter-Firm Relationships in the Automobile Industry: A Case Study of Toyota Motor Corporation," in *Organizational Capability and Competitive Advantage*, ed. William Lazonick and William Mass (Brookfield, Vt., 1995), 451-75, quotation at p. 452.

Evelyn Anderson <e.anderson@mcauley.acu.edu.au> is a doctoral student at Griffith University. She also lectures in economics at the Australian Catholic University, Brisbane.

URL: http://www.thebhc.org/publications/BEHonline/2007/anderson.pdf.

Keiretsu

Keiretsu is a post–World War II phenomenon in the Japanese automobile industry. The term first appeared as a significant event in July 1952 when the Small and Medium Enterprises (SMEs) Planning Bureau (*Chuushou Kigyou Kikakuchou*) issued guidelines for a program called "*Keiretsu Shindan*" (*Keiretsu* Diagnosis). This program targeted SMEs in the general machinery industry for productivity improvement. The objectives of the *Keiretsu* Diagnosis were to:

> investigate the extent to which auto assemblers were dependent on their supplier network, and the extent to which the suppliers could meet the management needs of their customers;
> study how supplier relationship impacted on the management of both parties;
> analyze and to manage the complementary relationship between the auto assemblers and their supplier network;
> identify the special features and areas for improvement of this mutual relationship;
> improve the transaction methods between the two parties based on the findings of the diagnosis;
> provide guidelines for the parts suppliers;
> overcome the issues of under capitalization and input shortage;
> promote co-operation between the assemblers and the suppliers;
> improve general management; and
> raise the economic standing of the components suppliers who were predominantly SMEs.[3]

Toyota was the first automobile assembler to participate in this program in September of 1952. Nissan joined the program one year later. Six other assemblers also took part, and the program concluded in 1958 with Mitsubishi as the last participant.[4]

Under the *Keiretsu* Diagnosis program, employees from the Aichi Industry Guidance Office and the Nagoya Industrial Technology Testing Centre visited a parts supplier and spent several days reporting on how each factory fared in terms of production and management efficiency. An employee from an auto assembler's Purchasing Department would accompany such inspections. The entourage collected information on the supplier's sales and cost of production for diagnosis and analysis. Advice was given on management, production, personnel relations, sales, and purchases, financial management, accounting, and testing/research. Company performance was evaluated using these criteria in a ranking order of A to E,

---

[3] Nihon Jidousha Kaigisho, ed., *Jidousha Nenkan* [Automotive Yearbook] (Tokyo, 1954), 19-20.
[4] Kenjo Kan, "Keiretsu Shindan," *Chuushou Kigyou* [Small-Medium Enterprises] 11 (1959): 30-35, quotation at p. 30.

with A being the highest. Publicizing the results stimulated competition among the suppliers.[5]

Various cooperative associations (*kyouryokukai*) were established around this time. Each assembler had its own association. The Nissan association, comprised of parts makers in the Yokohama district, was the Takara-kai. In 1954, Nissan shifted its Purchasing Department in Yoshihara to Yokohama, and the suppliers in the Yokohama area decided to band together to form the Takara-kai, which at first held only social functions. It developed into a *keiretsu* network in 1958, two years after the implementation of the first Provisional Act.[6] The Takara-kai members were small-scale operators, but they were keen to acquire the latest, most efficient management "know-how." Several divisions were formed, each catering to a different trade. Each division invited representatives from Nissan and other well-known authorities to give lectures and seminars. Member companies also took turns sharing new knowledge that would improve production and management. In 1959, Nissan developed a Quality Control (QC) concept that won the assembler the prestigious Deming Prize in the following year, an industry first for auto assemblers. The Takara-kai was a useful vehicle for co-coordinating the production activities of member firms so that the network acted as a united whole.[7]

Toyota has the oldest cooperative association and the only association formed before the Second World War. The company itself was founded in 1937 and two years later, in 1939, Kyouhou-kai was established with thirty-one founding members.[8] Kyouhou-kai is the least exclusive association, with some club members belonging to several other associations. For example, Nippon Denso and Aishin Seiki, both core members of the Toyota Group, belonged to two other associations in 1968. While Nippon Denso also belonged to Mitsubishi's Kashiwa-kai and Isuzu's Kyouwa Bukai, Aishin Seiki was a member of both Kashiwa-kai and Hino Jidousha Kyoukai. This means that Toyota was not an exclusive customer of Nippon Denso and Aishin Seiki; we could not say the same of Nissan's Takara-kai members, however. For

---

[5] Kazuo Wada, "Jidousha sangyou ni okeru kaisouteki kigyou kankei no keisei industry," 14.

[6] Jidousha Buhin Kougyoukai, Ooto Toreedo Jaanaru, ed., *Nihon no Jidousha Buhin Kougyou* [Japan's Automotive Components Industry] (Tokyo, 1968), 279.

[7] Nihon Jidousha Kaigisho, ed., *Jidousha Nenkan* [Automotive Yearbook] (Tokyo, 1972), 276-78; Nissan Jidousha Kabushiki Kaisha Shashi Hensan Iinkai [Editorial Committee of Company History, Nissan Automobile Company], ed., *Nissan Jidousha Shashi 1964*-1973 [Nissan Company History, 1964-1973] (Tokyo, 1975), 57-59.

[8] Yoshio Ooba, *Nihon Jidousha Sangyou no Seiritsu to Jidousha Seizou Gyouhou no Kenkyuu* [A Study on the Japanese Automobile Industry, Its Establishment and Legislation Affecting the Manufacturing of Automobiles] (Tokyo, 2001), 308.

example, Atsugi Automotive Parts and Kantou Seiki were the core members of Takara-kai (exclusively so in 1969).[9]

The *keiretsu* phenomenon coincided with the MITI legislation, and *keiretsu* became the generic name of the assemblers' cooperative associations. Kyouhou-kai was often referred to as the Toyota *Keiretsu*, the Takara-kai as the Nissan *Keiretsu*, and so forth. Trade journals began closely following the development of the various *keiretsu* affiliated with each major auto assembler, systematically documenting them in 1961, the beginning of the second five-year period of the Provisional Act.[10] From 1963 on, trade journals such as the *Automotive Yearbook* devoted their financial and production sections to the analysis and detailed reports of assembler-based *keiretsu*.

The Nissan Business Model

Nissan Motor Corporation (*Nissan Jidousha Kabushiki Kaisha*) was founded on December 27, 1928, with an initial capital of 50 million yen raised in the stock market. The company's founder was adept at buying small to medium companies and growing them.

Nissan's company history documented the assembler's philosophy in 1928 as follows:

> The parent company exercises vertical control at the top of a pyramid comprising of subsidiaries below. The parent provides these functions to the subsidiaries; control, guidance and assistance.
>
> Nissan's founder wanted to model the company on world-renowned corporations such as Standard Oil, U.S. Steel, and Du Pont. These companies were well capitalized, and they have expanded by investing and owning shares in subsidiaries established in related industries. Nissan's founder was also a great admirer of the growth strategy used by U.S. chain stores and cartels. The Nissan strategies were to spin off new units as the company expanded, and then grow each one of them through scale economy and efficiency improvement. Profit margins would improve with cost reduction. The parent company should exercise complete control and command over their subsidiaries.[11]

Statistics confirm Nissan's initial governance as hierarchical. The in-house production ratio for Nissan was 50 percent in 1936, rising to 68 percent in 1952.[12] How did a vertical integration strategy develop into what seems to be

---

[9] Nihon Jidousha Kaigisho, ed., *Jidousha Nenkan* [Automotive Yearbook] (Tokyo, 1968-69), 268-348.

[10] Nihon Jidousha Kaigisho, ed., *Jidousha Nenkan* [Automotive Yearbook] (Tokyo, 1961), 11.

[11] Nissan Jidousha Kabushiki Kaisha Shashi Hensan Iinkai, ed., *Nissan Jidousha Shashi 1964-1973*, 35.

[12] Yoshio Ooba, *Nihon Jidousha Sangyou no Seiritsu to Jidousha Seizou Gyouhou no Kenkyuu*, 311; Nihon Jidousha Kaigisho, ed., *Jidousha Nenkan* [Automotive Year-book] (Tokyo, 1955), 79-83.

an outsourcing strategy after 1956? The answer to this question lies in the Japanese economic environment before and just after the Second World War, which gave shape to Nissan's postwar business strategy.

The government granted Nissan special status before the war. In 1936, the company was one of only two "approved" companies (along with Toyota) permitted to manufacture automotive vehicles.[13] However, Nissan lost favor with the government after the war. The administration preferred Toyota, which proposed total self-reliance (the so-called 100 percent homegrown technology, or *jun kokusan gijutsu*). MITI favored "domestic" technology over "foreign" technology after the war because of one important postwar economic feature: Japan had developed a persistent shortage of foreign reserves. Japan's import policy reached a turning point in 1952. The boom brought about by the Army Procurement for America (APA) orders led to a serious current account deficit. The war destroyed many of the capital goods used in the automobile industry, necessitating the import of the latest machinery to keep pace with the dramatic rise in demand from the United States for special orders of trucks and cars. The automobile industry was a heavy user of imported technology. Consequently, the balance of payments deteriorated rapidly in 1952, as imports outstripped exports. The expectation that more U.S. imports would be required to meet U.S. APA orders created anticipation of a further deterioration of the current account deficit. The government began to impose various restrictions on automobile-related imports.[14]

Nissan was the first casualty of this new import policy. In 1952, the company requested a foreign reserve allocation of 180 million yen to import 200 press machines.[15] The Bank of Japan rejected Nissan's application and refused to alter its restrictive policy concerning foreign currency control. Nissan had lost its "special status" because its initial postwar strategy was to "import" foreign technology through a technology transfer agreement with Austin. The company could not access foreign reserves to pay for critical technology in 1952. After the enactment of the Kishinhou, scarce foreign reserves for the payment of imported foreign technology were allocated to components makers only. In addition, the parts suppliers could borrow at a lower interest rate. Would Nissan "spin off" internal departments, so they could pose as "sub-contracting components firms" in order to secure the benefits denied the parent company, simply for being an assembler? Would it want to internalize and regain more of its important production functions by acquiring a controlling interest in some of these firms, once the act expired?

---

[13] Jidousha Buhin Kougyoukai, Ooto Toreedo Jaanaru, ed., *Nihon no Jidousha Buhin Kougyou* [Japan's Automotive Components Industry] (Tokyo, 1963), 29.

[14] Nihon Jidousha Kougyou Kai, *Nihon Jidousha Sangyou Shi* [History of the Japanese Automobile Industry] (Tokyo, 1963), 102.

[15] Nihon Jidousha Kaigisho, ed., *Jidousha Nenkan* [Automotive Yearbook] (Tokyo, 1954), 303.

Nissan's Relationship with Its Core *Keiretsu* Firms: A Comparison with Toyota

Mr. Ohta, Managing Director of Nissan, stated during a 1971 interview:

> Atsugi Automotive Parts, Kantou Seiki and Nihon Radiator are more than 50 percent owned by Nissan. They are in fact Nissan's subsidiaries or internal divisions according to U.S. definitions. Therefore, the in-house production ratio for Nissan is not 30 percent-40 percent, but 45 percent-55 percent.[16]

The Spin-Off Strategy of Toyota and Nissan: Deceptive Similarity

Toyota spun off six companies between 1940 and 1949 in order to diversify risk and to concentrate on its core capabilities (see Table 1). Nissan had spun off two companies and bought two more (see Table 2). At first glance, both Toyota and Nissan had spun off companies that were comparable in technological and strategic importance. However, the similarity ends when we analyze the situation more closely using the Provisional Act as a backdrop.

With respect to Toyota, all the spun-off companies were once internal divisions, and separation occurred long before there was even discussion of a Provisional Act. The last company to gain independence from Toyota was Nippon Denso in 1949, seven years before MITI legislated the *Kishinhou*.

TABLE 1
Toyota's Spin-off Strategy for Financial Survival

Companies spun off	Date of separation/independence	Remarks
Toyota Shatai	1945	Car bodies manufacturing
Toyota Kouki	May 1, 1941	Engineering and machinery
Aichi Seikou	1940	Steel maker
Aichi Kougyou	March 1943	Joint venture with Kawasaki airplane. Capitalization: 50 million yen
Nippon Denso	1949	Electrical components
Toyota Motors Sales (TMS)		Forced to spin-off TMS as a condition of financial rescue

Source: Kousei Torihiki Kyoukai [Fair Trade Association], *Jidousha kougyou no keizairyoku shuuchuu no jittai* [Concentration and Market Power in the Automobile Industry] (Tokyo, 1959), 76-77.

---

[16] Jidousha Buhin Kougyoukai, Ooto Toreedo Jaanaru, ed., *Nihon no Jidousha Buhin Kougyou* [Japan's Automotive Components Industry] (Tokyo, 1971), 101-2.

TABLE 2
Nissan Spin-off Strategy

Companies spun off/created	Date Separated/Established/ Purchased	Remarks
Tokyo Seikoujo	Dec. 17, 1954	This steel maker was established in order to satisfy Nissan's union demand
Atsugi Automotive Parts	May 30, 1956	Spun off from an internal Nissan division based in its Atsugi factory; capitalized at 45 million yen.
Kantou Seiki	Oct. 25, 1956	Spun off from Nissan despite achieving an excellent technical standard in the manufacture of measurement instruments; capitalized at 25 million yen.
Nihon Radiator	April 1954	Nissan bought 60% of company's shares to secure the supply of radiators.

Source: Nissan Jidousha Kabushiki Kaisha Soumubu [General Affairs Section, Nissan Automotive Corporation], *Nissan Jidousha Sanjuu-nenshi* [30-Year History of Nissan Automotive] (Yokohama, 1965), 338-40.

Toyota shed those companies as part of a survival strategy, mired as it was in financial trouble during the harsh war environment and its immediate aftermath.[17]

In contrast, Nissan seemed to have different reasons for taking similar actions. Both Atsugi Automotive Parts (Atsugi) and Kantou Seiki were spun-off coincident with the legislation of the *Kishinhou*. In the boom year, 1956, with the expectation that the domestic car industry would grow further, risk diversification could not have been a consideration. Nor would a firm's strategy to concentrate its scarce financial resources on developing its core capabilities seem a likely motivation, for Nissan had sufficient funds to own both companies and Nihon Radiator.

Nissan's Relationship with Its Core *Keiretsu* Members

Atsugi was 99 percent owned by Nissan, with an initial capital of 45 million yen, 5 million yen below the Provisional Act's threshold of 50 million for foreign reserves allocation and MITI approval for low interest rate loans (see

[17] Evelyn Anderson, "The Enigma of Toyota's Competitive Advantage: Is Denso the Missing Link in the Academic Literature?" *Pacific Economic Papers*, 339 (2003): 1-45, esp. pp. 10-15.

Table 3). The original manufacturing products at Atsugi were screws, nails, and bolts. These do not involve "cutting-edge" technology, but do benefit from economies of scale, and complied with three categories of the designated machinery approved by MITI. The firm won nine MITI grants, and it supplied Nissan and Nissan-related companies (the Nissan-*ken* or Nissan Circle), exclusively. Nissan leased seventeen pieces of machinery to the new company, and outsourced all of its propeller shafts, 40 assembly items, and 93 related assembly items to Atsugi. The company later diversified into critical technology such as the manufacturing of pistons, oil pumps, clutches, suction mats, and propeller shafts. By 1971, screws, nails, pins, and bolts constituted only 2 percent of the company's output, and Atsugi manufactured some of the main items, such as electrical and control mechanisms, in competition with Nippon Denso.

Like Atsugi, Kantou Seiki was a separate company (founded in 1956), but capitalized at 25 million yen. Nissan owned 98.2 percent of this company. The company originally manufactured meters and measurement instruments, classified as category 15 in the MITI machinery approval list, and won eight MITI grants. In 1958, MITI designated this company as a model factory for meter measurements. As a result, the company was able to purchase the latest machinery and to modernize its production lines.

Nihon Radiator, established in 1938, initially manufactured radiators and mufflers for Ford, Shiboree, and Diamond.[18] It was renamed Nihon Radiator in 1952. Nissan bought 60 percent of Nihon Radiator's shares in an effort to secure a supply of radiators in 1955. Nissan appointed its deputy chief from its Yokohama Plant to become the managing director of Nihon Radiator in May of that year. In June, Nihon Radiator signed a contract to sell all of its radiators to Nissan. Like the other two companies, Nihon Radiator was in effect Nissan's subsidiary. The company won nine MITI grants in the first ten years of the *Kishinhou* period, and the prestigious Deming Prize in 1959, one year before Nissan itself received the same prize.

Nissan's equity in Atsugi and Kantou Seiki declined steadily from 1956 to 1971 (from 99 percent to 70.13 percent for Atsugi and from 98.2 percent to 93 percent for Kantou Seiki) (see Table 4). Sales to Nissan, in the case of Kantou Seiki, also showed a falling trend. Kantou Seiki had diversified 12 percent of its products to other buyers by 1971. On the other hand, Nissan increased its shares in Nihon Radiator from 55 percent in 1956 to 62 percent in 1971. Nihon Radiator also diversified its customers, selling 16 percent of its products to other companies.

[18] Nissan Jidousha Kabushiki Kaisha Soumubu, *Nissan Jidousha Sanjuu-nenshi* [30-Year History of Nissan Automotive] (Yokohama, 1965), 338.

TABLE 3
Nissan's Initial Equity in Its Core *Keiretsu*, October 1957

***Keiretsu* firm**	**Equity (%)**	**Remarks**
Atsugi Automotive Parts	99.0	Two Nissan executives were appointed to head this Nissan-financed company.
Kantou Seiki	98.2	One Nissan executive was appointed to company management. Nissan finance available.
Nihon Radiator	55.0	Nissan finance available.

Source: Kousei Torihiki Kyoukai [Fair Trade Association], *Jidousha kougyou no keizairyoku shuuchuu no jittai* [Concentration and Market Power in the Automobile Industry] (Tokyo, 1959), 94-95.

Nissan's Relationship with Its Extended Keiretsu Firms

Nissan's core *keiretsu* firms had won multiple MITI grants. Likewise, Nissan's investment in its extended *keiretsu* members shows a high level of correlation with MITI grants. Three numbers are worthy of attention. Japanese corporate law defines the minimum for control as a 25 percent stake held by an assembler in its *keiretsu* member. At this level, the shareholder can initiate proposals for policy consideration. A 33 percent stake will give the assembler sufficient control, for the chair of the shareholders' meeting rarely rejects such proposals. A 50 percent or above stake constitutes a definite controlling interest.

TABLE 4
Asset Specificity (Exclusiveness) of Nissan's *Keiretsu* in 1971

Core *keiretsu* firms	**Nissan's equity of *keiretsu* firms (%)**	**Exclusiveness: Nissan's share of *keiretsu* firm's sales (%)**
Atsugi Automotive Parts	70	100
Kantou Seiki	93	88
Nihon Radiator	62	86

Source: Ohkurasho [Ministry of Finance], *Yuuka Shouken Houkokusho* [Stock and Shares Report] (Tokyo, 1971).

FIGURE 1

Nissan Shareholding and Controlling Interest in Relation to MITI Grants in 1970

45 Companies in Nissan's *Keiretsu*

37 Companies
Complete Data (82%)

8 Companies
Data Incomplete (18%)

27 Companies received MITI grants (73%)

10 Companies without MITI grants (17%)

Nissan shares
< 25%
=12 Companies
(44%)

Akebono Brakes
Diesel Machines
Jidousha Denki Kougyou
Jidousha Kiki
Kayaba Kougyou
Nihon Kikai Seisakujo
Puresu Kougyou
Shikou Kougyou
Tochigi Fuji Kougyou
Tokiko
Topii
Nihon Tokushu Tougyou

Nissan shares
>25%
=15 Companies
(56%)

* Atsugi Parts
* Daikin Seisaku
Fuji Kikou
* Ikeda Bussan
* Kantou Seiki
* Nairusu Parts
* Nihon Radiators
* Ooi Seisakujo
* Tsuchiya Seisakujo
Kinugawa Gomu
Nihon Purasuto
Hashimoto Foaming
Yamakawa Kougyou
Yamato Kougyou
Yorozu Jidousha

Nissan shares
<25%
=3 Companies
(30%)

Central Glass
Fuji Juuko
Nihon Seiko

Nissan shares
>25%
= 7 Companies
(70%)

* Aichi Kikai
* Nissan Kouki
* Shin Nihon Tanko
* Tokyo Sokuhan
* Nihon Daiyakurebaito
Fuji Tekko
Nihon Jidou Hensokuki

Notes: *Nissan's shares in these companies exceeded 33 percent, which constitute a sufficient controlling interest according to Japanese corporate law. The eight companies with incomplete data are Ichikawa Seisakujo, Sharin Kougyou, Teikoku Denpa, Higashi Nihon Tanko, Hitachi Kinsoku Kougyou, Hitachi Seisakujo, Yokohama Gomu, and Tokyo Puresu Kougyou.

Sources: Toshichika Matsui, "Jidousha Kougyou ni okeru shitauke / keiretsuka no jittai (jyou) – motokata fukusuuka dankai no kigyou keiretsu nit suite" [Sub-contracting and *keiretsu* in the automotive industry (Part I) – corporate *keiretsu* seeking customer diversification] " *Ritsumeikan Keieigaku* [Ritsumeikan Management Studies] 12 (Sept. 1973): 21-70, esp. 62-70; Nihon Keizai Shimbunsha, *Kaisha Nenkan* [Corporation Annual Reports] (Tokyo, various years); Jidousha Buhin Kougyoukai, Ooto Toreedo Jaanaru, ed., *Nihon no Jidousha Buhin Kougyou* [Japan's Automotive Components Industry] (Tokyo, various years); Ohkura*sho* [Ministry of Finance], *Yuuka Shouken Houkokusho* [Stock and Shares Report] (Tokyo, various years); Shuuji Yamazaki, *Sengo Nihon no Jidousha Sangyou Seisaku* [Postwar Industrial Policy for the Japanese Automobile Industry] (Kyoto, 2003); questionnaires and interviews with Mr. Fujiki, who headed Nissan's Car Parts Purchasing Division.

Figure 1 shows that in 1970, 73 percent of Nissan's investment was found in firms that had received MITI grants, in 56 percent of which Nissan had a minimum controlling interest of over 25 percent. Nissan had sufficient controlling interest in 53 percent of the firms in which Nissan held more than 25 percent equity (eight of fifteen companies).

At the end of the third and final *Kishinhou*, Nissan held at least 25 percent (minimum controlling interest) equity in fifteen companies, eleven of which had received direct MITI grants. The remaining four had indirectly received MITI grants through mergers and technology cooperation agreements (see Figure 1 and Table 5).

Out of these fifteen companies, nine were new acquisitions made during the third *Kishinhou* period (1966-1970). Of these nine companies, six (67 percent) were acquired in 1970, the year *Kishinhou* expired. All nine companies had won MITI grants before Nissan bought them. These nine companies comprised 19 percent of Nissan's total investment in 1970.

Nissan's investment in the MITI-approved machinery parts suppliers' network slowed significantly in 1971, one year after the *Kishinhou* terminated. The only increase that Nissan made in 1971 was an additional investment (227.5 million yen) in Tsuchiya Seisakujo. This contributed to a 2 percent increase in Nissan's total investment on a year-on-year basis. In contrast, Nissan's investment in the same group of companies during the third *Kishinhou* period rose at an average rate of 32 percent on a year-on-year basis.

TABLE 5
Automotive Components *Keiretsu* Firms Receiving MITI Grants (Nissan Stake a Minimum of 25%), 1970

Company	**No. of MITI Grants**
Nihon Radiator	9
Atsugi Parts	9
Kanto Seiki	8
Daikin Seisakujo	11
Fuji Kikou	1
Nihon Purasuto	1
Ohi Seisakujo	2
Niles Parts	9
Ikeda Bussan	5
Tsuchiya Seisakujo	8
Kinugawa Gomu	7

Source: Shuuji Yamazaki, *Sengo Nihon no Jidousha Sangyou Seisaku* [Postwar Industrial Policy of the Japanese Automobile Industry] (Kyoto, 2003), 59-62.
Notes: Four had received MITI's funding indirectly through mergers: Hashimoto Foaming merged with Natori Gomu in 1966 (MITI grant: 1); Yamakawa Kougyou

with Nagada Kougyou in 1966 (MITI: 2); Yamato Kougyou with Mitsuike Kougyou in 1963 (MITI: 1); Yorozu Jidousha Kougyou with Sugimoto Kinzoku in 1967 (MITI: 2).
Fuji Kikou merged with Kato Seisakujo in 1966; Kato Seisakujo won one MITI grant. Ohi Seisakujo merged with Jonan Seisakujo in 1967; Jonan Seisakujo won four MITI grants.

These findings suggest that Nissan purchased a significant number of parts suppliers for control just before the Provisional Act expired in 1970. All companies either directly or indirectly received MITI grants. There could be two reasons for Nissan's investment behavior. First, Capital Liberalization had its commencement year in 1971. Foreign firms could buy Japanese companies, including member firms of Nissan's *keiretsu*, from 1971 onward. Second, Nissan might have bought controlling stakes in important suppliers because these companies were "subcontractors" only for the duration of the *Kishinhou* period. They "temporarily" outsourced these for two reasons. Nissan needed to overcome the foreign reserve allocation constraint imposed by the Bank of Japan, before it could modernize its own capital equipment. In addition, parts suppliers had lower borrowing costs relative to assemblers, for MITI funding was available only to parts-makers. Nissan might have wanted to regain control by purchasing some of the companies that had won MITI grants as the final Provisional period ended. Mr. Ohta, managing director of Nissan, confirmed that his company would consider raising its in-house production ratio as of 1971.[19] His comment lends additional support to the thesis that Nissan had pursued, in essence, a vertical integration strategy in the 15-year period during which the *Kishinhou* was enforced.

Conclusions

Focusing our analysis on Nissan's core and extended *keiretsu* between 1956 and 1970 in light of the Provisional Act reveals that during this period:
a) Nissan's outsourcing ratio in 1971 in terms of value-added (taking into account that the assembler's core *keiretsu* were in fact its subsidiaries) was 45 to 55 percent, not 70 percent as is commonly claimed; b) Nissan's acquisition strategy throughout the Provisional Act period was positively related to MITI grants; and c) a positive correlation existed between Nissan's controlling interest in its *keiretsu* members (both core and extended) and the exclusive relationships that these members had with Nissan. This is indicative that Nissan was more vertically integrated (although vertical integration was disguised as an outsourcing strategy in order to satisfy MITI's requirement) than has been commonly understood.

Jeffrey Dyer observes, "Japan has been described as a high trust environment," where inter-firm trust is a key factor that facilitates exchange and creates competitive advantages for Japanese firms. Some scholars even claim that national economic efficiency is highly correlated with the existence

---

[19] Jidousha Buhin Kougyoukai, Ooto Toreedo Jaanaru, ed., *Nihon no Jidousha Buhin Kougyou* [Japan's Automotive Components Industry] (Tokyo, 1971), 102.

of an institutional environment of high trust. For example, Francis Fukuyama argues that the economic success of a nation, "as well as its ability to compete, is conditioned by . . . the level of trust inherent in the society. Indeed, numerous scholars have suggested that inter-organizational trust is a key factor in explaining the competitive advantage of Japanese firms relative to U.S. or U.K. firms."[20]

I show that Nissan's postwar governance structure might have been shaped by ex-ante "distrust" and girdled with asset-specificity by way of controlling shareholding investment in their suppliers, who in turn committed themselves with dedicated assets to Nissan. Both parties—the assembler and the suppliers—cooperated for at least fifteen years while the Provisional Act was in force because the MITI legislation provided a common interest objective for both to do so. We must therefore regard Dyer's comments with reservation.

---

[20] Ronald Dore, "Goodwill and the Spirit of Market Capitalism," *British Journal of Sociology* 34 (Dec 1983): 459-82; Mari Sako, "The Role of 'Trust' in Japanese Buyer-Supplier Relationships," *Ricerche Economiche* 45 (aprile-settembre 1991): 449-74; Charles W.L. Hill, "National Institutional Structures, Transaction Cost Economizing, and Competitive Advantage: The Case of Japan," *Organization Science* 6, no. 1 (1995): 119-31; Douglass North, *Institutions, Institutional Change and Economic Performance: Political Economy of Institutions and Decisions* (Cambridge, U.K., 1990); Mark Casson, *Enterprise and Competitiveness: A Systems View of International Business* (Oxford, 1990); Francis Fukuyama, *Trust: The Social Virtues and the Creation of Prosperity* (New York, 1995); Jeffrey H. Dyer,"Specialized Supplier Networks as a Source of Competitive Advantage: Evidence from the Auto Industry," *Strategic Management Journal* 17, no. 4 (1996): 271-92; Jeffrey H. Dyer, "The Economic Value of Trust in Supplier-Buyer Relations," *MIT Working Paper* no. W-0145a (1998), 1-30, quotation at p. 11.