Small Business in Japan: A Historical Perspective

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ABSTRACT. Small firms have been considered to be an important element of the industrial structure in Japan since the turn of the century. In this paper the history of small business in Japan is examined. In particular, the dramatic development of the technological and managerial ability of small firms within the last two decades is analyzed. Under the regime of rapid industrial restructuring in Japan, small firms are identified as developing their own diversive management strategies, especially with respect to international trade and the implementation of information and high technology.

I. Introduction: Japanese small business in the international limelight

There currently exists an unprecedented enthusiasm for small business in virtually every country throughout the world. This applies not only to nations within the so-called free world, but also within the socialist bloc, as well as both developed and developing countries. In the industrialized nations, the newly created businesses, typically associated with small enterprises, have been thought to be the key to revitalizing the entire structure of the economy. Thus, in the midst of a restructuring of industry, which has often been referred to as the third industrial revolution, small firms have emerged as playing a key role. In particular, developing nations have recognized that an urgent priority must be assigned to the development of small firms rather than large firms in order to accelerate industrialization. The transfer of technologies to small business is crucial in raising the technological level in such countries. And, in the developed nations, small firms have become an important source of job creation in that they have not only been responsible for creating the bulk of jobs (Acs and Audretsch, 1989a; Storey and Johnson, 1987), but also have created jobs in a work environment with more concerns for human needs.

In the midst of the rising enthusiasm for small business (Acs and Audretsch, 1989b; Brock and Evans, 1989), considerable attention has also been focused on small firms in Japan. In the last decade Japan has achieved a remarkable rate of industrial development along with an extraordinarily strong degree of international competitiveness (Audretsch and Yamawaki, 1988). The basic factors contributing to this remarkable achievement are "Japanese-style management" being applied in a huge and robust group of small businesses. In addition, the subcontracting system of production has greatly promoted the international competitiveness of Japanese industry. The success of Japanese small manufacturing firms has become the envy of the world.

Small businesses in Japan have played a multidimensional role. By the term "small business", I refer to those firms which are not large, which is a fairly broad definition. As Yamanaka (1948, p. 30) noted, Japanese small firms are heterogeneous and pluralistic. Recently, especially in the latter half of the 1970s and 1980s, as the industrial structure has been transformed, it is not surprising that small business in Japan has similarly undergone an unprecedented transformation. Most importantly, the level of technological and managerial ability has been so highly developed that Japanese small firms are now able to successfully adjust to virtually any shift in the industrial structure. This is supported by the evidence in the next section, which shows that the share of employment accounted for by small firms has risen considerably between 1960 and 1983.

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II. The role of small business in the Japanese economy, 1960—1986

Using data from the Management and Coordination Agency from the Census of Establishments conducted by the Japanese Government, Table I shows the evolution of the number of small business establishments across the nine major sectors between 1960 and 1986. A small business establishment is defined as having fewer than 300 employees, except in wholesaling and retailing, as well as for services, where small establishments are defined as having fewer than 100 and 50 employees, respectively. There are three important points to be made from Table I. First, in 1986 the nearly 6.5 million small business establishments accounted for over 99 percent of all the establishments in Japan. Second, in every sector, with the exception of electricity, gas, and water, the number of small businesses has increased. It should be noted, however, that the number of establishments has been increasing at a decreasing rate in manufacturing. Third, the wholesale and retail sector has accounted for around half of the small-firm establishments. This share has been decreasing somewhat over time.

Table II shows the number of employees, in thousands, in small business establishments between 1960 and 1986. Of the nearly 49 million employees in 1986, 80 percent were employed in small businesses. Over half of this employment was in the wholesale and retail, and service sectors. While only 13.5 percent of the establishments were in manufacturing, over one-quarter of the employment was accounted for by the manufacturing sector. This certainly reflects the relatively high capital-labor ratio in manufacturing industries. Although not listed in the table, total private employment has increased from 23.16 million in 1960, to 38.79 million in 1972, to 45.72 million in 1981, and finally to 49.00 million in 1986. Thus, the share of employment accounted for by small firms in the Japanese economy has remained fairly constant over time, at 79.58 percent in 1960, 78.37 percent in 1972, 81.36 percent in 1981, and 80.63 percent in 1986.

Because manufacturing is the key sector for every industrialized country, Table III examines the number of establishments in manufacturing, according to establishment size, between 1960 and 1983. While there has clearly been a substantial increase in the number of establishments of all sizes, there has been no noticeable shift in the size-distribution of establishments, when measured by number of establishments within each size category. However, this conclusion does *not* emerge when the establishments are classified by employment in Table IV. There has clearly been a restructuring of industry towards small businesses in the manufacturing sector. In 1960 businesses with at least 1000 employees accounted for 16.8 percent of all employees, and businesses with between 300

TABLE I
Number of small business establishments by sector, 1960—1986

Sector	1960	%	1972	%	1981	%	1986	%
Mining	9,553	0.2	8,305	0.2	6,941	0.1	5,980	0.1
Construction	195,220	5.5	409,520	8.1	550,044	8.8	575,957	8.9
Manufacturing	549,778	15.5	788,619	15.5	868,334	13.9	870,262	13.5
Wholesale and retailing	1,845,470	52.0	2,506,601	49.3	3,011,216	48.3	3,030,074	47.0
Banking and insurance	51,119	1.4	61,468	1.2	83,259	1.3	94,264	1.5
Real-estate	38,472	1.1	153,953	3.0	237,513	3.8	256,837	4.0
Transport and communications	66,101	1.9	94,621	1.9	132,929	2.1	143,727	2.2
Electric, gas and water	7,563	0.2	6,262	0.1	4,593	0.1	3,854	0.1
Services	786,230	22.2	1,053,880	20.7	1,334,709	21.4	1,467,168	22.8
Total	3,549,506	100.0	5,083,229	100.0	6,229,538	100.0	6,448,123	100.0

Source: Management and Coordination Agency, Japanese Government, "Census of Establishments", various years.
Note: The small business establishments in this table are those with fewer than 300 employees (except for wholesaling with fewer than 100 employees, retailing and services with fewer than 50 employees).

TABLE II
Number of employees (thousands) in small business establishments by sector, 1960—1986

Sector	1960	%	1972	%	1981	%	1986	%
Mining	176	1.0	119	0.4	98	0.3	78	0.2
Construction	1,424	7.7	3,594	11.8	4,714	12.7	4,597	11.6
Manufacturing	6,264	34.0	9,209	30.3	9,552	25.7	9,921	25.1
Wholesale and retailing	6,214	33.7	10,053	33.1	12,976	34.9	13,635	34.5
Banking and insurance	650	3.5	1,161	3.8	1,453	3.9	1,548	3.9
Real-estate	90	0.5	384	1.3	610	1.6	694	1.8
Transport and communications	945	5.1	1,716	5.6	2,083	5.6	2,446	6.2
Electric, gas and water	116	0.6	122	0.4	138	0.4	140	0.4
Services	2,553	13.9	4,039	13.3	5,580	15.0	6,448	16.3
Total	18,431	100.0	30,398	100.0	37,204	100.0	39,506	100.0

Source: Management and Coordination Agency, Japanese Government, "Census of Establishments", various years.
Note: The small business establishments in this table are those with fewer than 300 employees (except for wholesaling with fewer than 100 employees, retailing and services with fewer than 50 employees).

TABLE III
Number of establishments in manufacturing by establishment size, 1960—1983

Number of employees	1960	%	1969	%	1978	%	1983	%
1—9	345,673	71.0	475,058	73.4	569,866	76.0	595,686	76.3
10—19	71,079	14.6	88,773	13.7	83,689	11.2	87,088	11.2
20—99	59,882	12.3	67,824	10.5	77,058	10.4	83,028	10.6
100—299	7,588	1.6	11,096	1.8	10,231	1.4	10,919	1.4
300—999	2,210	0.5	3,297	0.5	2,820	0.4	2,909	0.4
1000—	618	0.1	878	0.1	673	0.1	650	0.1
Total	487,050	100.0	646,926	100.0	744,337	100.0	780,280	100.0

Source: Ministry of International Trade and Industry (MITI), "Industrial Census".
Note: 1960 and the others are somewhat inconsistent because of variations in the coverage.

TABLE IV
Number of employees (thousands) in manufacturing by establishment size, 1960—1983

Number of employees	1960	%	1969	%	1978	%	1983	%
1—9	1,194	14.6	1,892	16.6	2,178	20.0	2,248	19.8
10—19	960	11.8	1,263	11.1	1,152	10.6	1,196	10.5
20—99	2,295	28.1	2,795	24.5	2,987	27.4	3,184	28.1
100—299	1,231	15.1	1,794	15.7	1,651	15.2	1,762	15.5
300—999	1,115	13.6	1,676	14.7	1,412	13.0	1,463	12.9
1000—	1,374	16.8	1,992	17.5	1,512	13.9	1,495	13.2
Total	8,169	100.0	11,412	100.0	10,890	100.0	11,347	100.0

Source: Ministry of International Trade and Industry (MITI), "Industrial Census".
Note: 1960 and the others are somewhat inconsistent because of variations in the coverage.

and 999 employees accounted for 13.6 percent of all employees, so that 30.4 percent of employees were in establishments with at least 300 employees. However, by 1983 businesses with at least 1000 employees accounted for 13.2 percent of all employees, and businesses with between 300 and 999 employees accounted for 12.9 percent of all employees, so that only 26.1 percent of employees were in establishments with at least 300 employees. This suggests that there has been a shift in the size distribution of businesses towards smaller establishments in Japanese manufacturing.

The distribution of small establishments in manufacturing across specific industries between 1966 and 1983 is examined in Table V. There are several points that are important to make from Table V. There has been a substantial decrease in the share of plants accounted for by small businesses in the food, textile, lumber, and chemical industries. By contrast, small enterprises have accounted for an increased establishment share over time in the petroleum and coal products, rubber, electrical machinery, and industrial machinery industries. Thus, by 1983, small enterprises had the greatest presence in the metal-working, textile, food, and industrial machinery industries.

The distribution of employment according to establishment size across manufacturing industries is shown in Table VI. It is clear that except in the textile, lumber, chemical, and petroleum industries there has been a substantial increase in employment in small manufacturing enterprises. The employment share of small businesses has apparently increased the most in the apparel and textile, electrical machinery, and industrial machinery industries. By 1983, small businesses accounted for the greatest share of employment in the food, electrical machinery, metal-working, and industrial machinery industries. It is important to note

TABLE V
The number of small establishments in manufacturing according to industry classification, 1966—1983

Industry	1966	%	1978	%	1983	%	1966—1978 %	1978—1983 %
Food and kindred products	97,168	16.4	84,978	11.5	83,098	10.7	−12.5	−2.2
Textiles	104,953	17.8	106,500	14.4	99,210	12.8	1.5	−6.8
Apparel and textile products	28,038	4.7	46,147	6.2	52,640	6.8	64.6	14.1
Lumber and wood products	52,489	8.9	43,898	5.9	39,517	5.1	−16.4	−10.0
Furniture	33,557	5.7	41,977	5.7	44,626	5.7	25.1	6.3
Pulp and paper products	17,132	2.9	17,992	2.4	17,812	2.3	5.0	−1.0
Publishing and printing	24,651	4.2	43,889	5.9	51,404	6.6	78.0	17.1
Chemicals	6,919	1.2	5,533	0.7	5,925	0.8	−20.0	7.1
Petroleum and coal products	681	0.1	906	0.1	1,120	0.1	33.0	23.6
Rubber products	3,384	0.6	7,435	1.0	8,743	1.1	119.7	17.6
Leather products and fur	8,530	1.4	12,307	1.7	13,025	1.7	44.3	5.8
Clay and stone	27,958	4.7	33,383	4.5	33,692	4.3	19.4	0.9
Iron and steel	6,234	1.1	9,024	1.2	9,062	1.2	44.8	0.4
Non-ferrous metals	3,781	0.6	5,749	0.8	6,136	0.8	52.0	6.7
Metal-working	53,865	9.1	89,270	12.0	93,745	12.1	65.7	5.0
Industrial machines (including weapons)	36,181	6.1	61,534	8.3	71,572	9.2	70.1	16.3
Electrical machinery	15,845	2.7	32,634	4.4	40,049	5.2	106.0	22.7
Transportation machinery	13,889	2.3	21,676	2.9	23,172	3.0	56.1	6.9
Precision equipment	7,776	1.3	12,324	1.7	12,728	1.6	58.5	3.3
Other manufacturing	48,181	8.1	63,688	8.6	69,445	8.9	32.2	9.0
Manufacturing total	591,212	100.0	740,844	100.0	776,721	100.0	25.3	4.8

Source: Ministry of International Trade and Industry, "Industrial Census".
Note: The Standard Industrial Classification (SIC) has been revised several times resulting in some inconsistency in the data.

TABLE VI
Employees of small establishments in manufacturing according to industry classification, 1966—1983

Industry	1966	%	1978	%	1983	%	1966—1978 %	1978—1983 %
Food and kindred products	982,206	13.7	1,013,717	12.7	1,049,716	12.5	3.2	3.6
Textiles	990,741	13.8	745,462	9.4	682,256	8.1	−24.8	−8.5
Apparel and textile products	319,044	4.4	532,237	6.7	558,749	6.7	66.8	5.0
Lumber and wood products	515,972	7.2	396,505	5.0	321,822	3.8	−23.2	−18.8
Furniture	254,501	3.5	293,318	3.7	283,963	3.4	15.3	−3.2
Pulp and paper products	255,511	3.6	240,657	3.0	242,102	2.9	−5.8	0.6
Publishing and printing	337,799	4.7	416,832	5.2	470,402	5.6	23.4	12.9
Chemicals	203,727	2.8	198,247	2.5	211,214	2.5	−2.7	6.5
Petroleum and coal products	19,715	0.3	14,496	0.2	16,393	0.2	−26.5	13.1
Rubber products	70,830	1.0	91,607	1.1	105,342	1.3	29.3	15.0
Leather products and fur	70,138	1.0	89,302	1.1	88,528	1.1	27.3	−0.9
Clay and stone	404,248	5.6	455,668	5.7	435,434	5.2	12.7	−4.4
Iron and steel	181,287	2.5	179,510	2.3	174,716	2.1	−1.0	−2.7
Non-ferrous metals	79,818	1.1	93,943	1.2	99,107	1.2	17.7	5.5
Metal-working	606,843	8.5	748,310	9.4	780,451	9.3	23.3	4.3
Industrial machinery (including weapons)	633,523	8.8	711,207	8.9	797,916	9.5	12.3	12.2
Electrical machinery	416,940	5.8	681,520	8.6	915,052	10.9	63.5	34.3
Transportation machinery	262,404	3.7	337,191	4.2	360,207	4.3	28.5	6.8
Precision equipment	125,555	1.7	166,557	2.1	180,402	2.2	32.7	8.3
Other manufacturing	445,764	6.2	560,541	7.0	615,991	7.3	25.7	9.9
Manufacturing total	7,176,566	100.0	7,966,827	100.0	8,389,763	100.0	11.0	5.3

Source: Ministry of International Trade and Industry, "Industrial Census".
Note: The Standard Industrial Classification (SIC) has been revised several times resulting in some inconsistency in the data.

that the Japanese international competitiveness has proven to be quite strong in these latter three industries.

III. Small business economics research in Japan

In 1911 the Ministry of Agriculture and Commerce made a distinction between small-scale, medium-scale, and large-scale industries. For example, the Ministry applied the concept of "medium-scale industry" to categorize weaving mills using power looms, and the concept of "small-scale industry" for domestic traditional weaving firms (Yui, 1964). With the establishment of the Small and Medium Enterprise Agency within the Ministry of International Trade and Industry (MITI) in 1948, these two types of firms were grouped together for policy purposes. Perhaps as a result, Shinohara (1968, p. 3) has observed that, "There is a specific group of Japanese economists devoting their research almost exclusively to the study of small and medium enterprises, thereby reflecting the abundance of these enterprises in Japan and the importance of their problems." Thus, there is a long tradition of the scientific study of small and medium sized enterprises in Japan.

However, as Shinohara (1976) points out, the influence of American scholars may have led their Japanese counterparts to ignore important aspects of the Japanese industrial structure which do not exist in the United States. For example, small subcontractors and affiliates of larger parent companies play a much more important role in the organization of Japanese industries than in American industries. But, as Shinohara (1976, pp. ii—iii) has observed, "Generally, Japanese scholars of industrial organization have been inclined to imitate the American frame of reference which emphasizes the analysis of monopoly on the sellers' side of the market." Yet in Japan, monopoly power on the side of the buyers may play a much more important role.

Japan has had a unique historical experience with the development of small firms. Industrialization under a capitalistic system took place later in Japan than in most other advanced nations. Along with industrialization, came a huge influx of people who were driven out of farm areas into cities. From this large army of "surplus labor", emerged "compelled independence", or the establishment of self-employment, generally in the form of small shops. However, the earnings from these businesses were frequently extremely low, resulting in numerous business failures.

During the Second World War small and medium-sized enterprises were directly and indirectly mobilized and utilized for the purpose of engaging in the production of military goods. As a result, many small and medium-sized enterprises became economically viable. The formation of a system utilizing smaller firms as subcontractors during the war continues to be an important feature of the Japanese industrial structure today. At the beginning of the 1940s, Komiyama (1941) used the Population Census and the Census of Factories and found that very small businesses with fewer than five employees accounted for 95 percent of all business units and half of all the workers. Small businesses with thirty workers or fewer accounted for 63 percent of all employment, and those with 100 workers or fewer accounted for 73 percent of the labor force. Thus, he concluded that over 70 percent of all Japanese workers were employed by small businesses. These estimates were generally supported by Arisawa (1940). However, Arisawa concluded that the productivity of the smaller businesses lagged considerably behind that of larger counterparts.

As a result of a directive issued by the General Headquarters of the Occupying Army (GHQ), the Small and Medium Enterprise Agency was established in the Ministry of International Trade and Industry on August 1, 1948. The purpose of the Agency was clearly staged in Article 1 of The Law to Establish the Small and Medium Business Agency:

> . . . in the light of the fact that sound and healthy independent small-business concerns will make the national economy sound and healthy, and to help the national economy to grow, to prevent the concentration of economic power and to secure the fair opportunities for carrying out economic activities, the objectives of the Agency are to nurture and promote small business and establish the conditions sufficient to improve the management of small business.

Accordingly, the policy towards small business in the post-war era began with the dissolution of the Zaibatsu, or the old family monopolies and financial groups, along with the dismemberment of large companies in favor of a form of economic democracy. This policy created the foundations of the post-war policy towards promoting the viability of smaller firms.

Many of the self-employed were former employees of the war plants or returning soldiers from the war. Consequently, small enterprises sprang up in great numbers. These small businesses thrived during the Korean War, when they were able to reap a huge profit. However, when Mr. Dodge, the American Minister exerted a strong pressure on the Japanese Government to stabilize the economy, resulting in a recession caused by what was called the "Dodge Line", the termination of the Korean War led to the bankruptcy of numerous small firms. As a result, the Government pursued a policy "to protect and nurture small business and to save it."

In an unprecedented move, The Government White Paper on the Economy for 1957 examined the role of small business and introduced its "theory of dual structure" (pp. 33—43). While the White Paper published in the previous year mentioned that ". . . we are no longer in the post-war period", the 1957 White Paper pointed out that, "The dual structure, namely the modern sector and the pre-modern sector exist side by side within one country". In addition, there is no other way but to "reduce the dual structure" through pursuing a bold policy promoting economic growth, that will eliminate the seemingly permanent unemployment in the Japanese economy. As some of the smaller firms began to earn a rate of profit actually exceeding that of their larger counterparts, the dual structure came to be discussed mainly as a problem of the difference between large and small business (Komiya, 1962, Kawaguchi, 1962, and Tamanoi and Uchida, 1964).

During the period of high economic growth between 1955 and 1973, and in subsequent years when this high rate of growth somewhat subsided, there was a noticeable development of subcontracting small factories in terms of management quality along with a significant improvement in technological adaptation. There were conscious efforts directed toward acquiring more advanced technologies. A survey undertaken by the Central Bank for Commerce and Industry Cooperatives in 1983 indicated that 51.1 percent of the subcontracting firms claimed that their technological level was at parity or exceeded that of their parent companies. During this period parent companies changed the control of their subcontractors from the status as supplementary suppliers and as a buffer mechanism, to a more modern system of subcontracting management. Thus, by the 1980s, there was substantially more analysis undertaken by Japanese scholars on subtracting systems or on inter-firm relationships affecting quasi-vertical integration, transactions costs, and networking organizations.

IV. Japanese small business in the 1980s

The year 1980 was heralded as the dawn of the age of industrial robots. Following the two oil crises, Japanese firms were able to maintain their international competitiveness by increasing organizational efficiency far beyond what has generally been termed as "rationalization" of industry, through innovations affecting the operation and management of factory automation and office automation. While the great wave of technological innovations which has been labelled as the "Third Industrial Revolution" had been building up for years, it blossomed in the 1980s. Most significantly was the emergence of information networks. Based on the rapid development of microelectronics and other high technologies such as numerically-controlled machines, biotechnology, new materials, and advanced software systems, the information industry was revolutionized. Not only have these information networks had a substantial impact on numerous industries, but also on small business.

First, a transformation is occurring within many manufacturing systems. There has been a proliferation of production of multiple product lines in relatively small quantities, which has largely been made possible as a result of the implementation of computer-integrated manufacturing systems. Between 1955 and 1965 specific-purpose machines were automated. During the following decade those machines were replaced by numerically controlled machines, machining centers, and industrial robots. Thus, a system of production enabling multiple products in relatively small batches became feasible. This flexible method of production has become virtually the norm in the 1980s.

Following the September 1985 meeting of the Finance Ministers of the five great nations, and the subsequent rapid revaluation of the yen, an industrial restructuring has taken place. The major problems confronting small firms in Japan emanate from this rapid escalation in the value of the Yen. As a result of the appreciated yen, many Japanese enterprises are establishing new plants in foreign countries rather than in the domestic market. Consequently, small firms are increasingly required to develop more effective strategies for survival. More than ever, entrepreneurs in small firms must be sensitive to the needs of customers and to develop new products to exploit potentially new markets. In particular, small firms need to: (1) develop into small but strong "global enterprises" which are based on the most developed high technologies, (2) aggressively develop their own overseas subsidiaries through foreign direct investment, and (3) endeavor to become more independent from their parent firms.

V. Conclusion

One of the most striking features of small firms in Japan is that they are now developing their own management strategies. Even to the extent they are often called "subcontractors" of larger firms, they no longer tend to be captive to any large firm, but are instead becoming increasingly independent business entities. There are five major themes for further research on small firms in Japan which should be emphasized. First, a dynamic theory of small firms must be developed. Second, the actual trends and experience of small firms over time need to be more carefully documented. Third, the possibility of transferring the management techniques and experiences of Japanese small business to other countries should be considered. Fourth, the role of small firms in developing and applying new technologies needs to be explored. Finally, the study of small firms may contribute to the field of dynamic industrial organization and serve as a means for infusing dynamic forces into oligopolistic models.

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