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Introduction and Summary
(of Firms and Industrial Organization in Japan)

Firms and Industrial Organization in Japan (1)
(revised version)

by

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August 1994

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Preface and Acknowledgements

Chapter 1 (with the same title)

of the book forthcoming in 1995

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Original version of Chapter 1 is reorganized into Sections 1-2 and 1-3, and so are Introductions to Part I, Part II, and Part III into Sections 1-4, 1-5, and 1-6.

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[Any comment, advice, suggestion, and question is very welcome. But, please not quote.]

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Preface and Acknowledgements

I wrote this book primarily to two groups: for the scholars and students in economics, particularly in the fields of industrial organization and economic theory interested in the theory of the firm and the market and for comparativists interested in Japan. Unlike most books on the Japanese economy, I argue in this book that nothing is peculiar to Japan. Many argue that Japan is different, and there exists a huge collection of the stylized facts about the Japanese economy. But most are either non-existent or based on a shaky ground. Japan has been for a long time a world of exchange by agreement rather than by coercion, and cost and benefits of agreement determine its scope. It is my purpose to demonstrate that the standard economics principles explain the dominant patterns of Japanese economic phenomena. The principles are not those anyone invented to explain Japan. Indeed, they were not invented to explain any particular society. But this is my point. For I argue below that the essence of the underlying mechanism of the Japanese economy closely resembles the <u>essence</u> of the underlying mechanism in <u>most</u> other economies. I wish to deal only with Japan, and only with the basic contours of behavior of firms and function of the market. That I consider challenge enough. Readers are expected not to have any knowledge of Japan, particularly that of <u>stylized facts</u> and anecdotes about the Japanese economy, but to have a basic knowledge of economics and a strong intention of thinking logically even in a noisy flood of exotic talks about Japan full of strange tales and anecdotes.

(Continued).....

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Chapter 1. INTRODUCTION AND SUMMARY

1-1. Introduction

Fifty years have passed since the end of the World War II in 1945, and almost 40 years have passed since 1956 Economic White Paper solemnly declared: "No longer are we in the postwar age. We are now facing with a new, different situation." But, so far the basic views of Japanese firms, industries, therefore, of the Japanese economy are concerned, the postwar age has not yet ended, and we are still in a situation as have to insist strongly and speak low repeatedly that no longer are we in the postwar age. The view of the Japanese economy dominant in 1950s and 60s (hereafter referred to as "the conventional view of the Japanese economy" or simply "the conventional view") usually implicitly but often explicitly dominates still in 1990s both at home and abroad. This view and models based on it not only are no longer effective in analyzing the present Japanese economy but also were not effective in 1950s and 60s. No longer are we in postwar age in that we must have put an end long time ago to the basic view invented for an understanding of the postwar Japan, and that we should have begun a new study of the Japanese economy on the critical review of the literature and this tradition.

Today the industrial success of the Japanese economy gathers world wide attention, and many people are interested in the economic development of Japan, and its causes and underlying mechanism. Their focus centers particularly on firms, industries, and the roles of the government and its contribution. These interests naturally stimulate those in the historical process. As mentioned soon, the 1950s and 60s are the so-called High-Growth era of the Japanese economy through which it grew to be the second largest among G7 countries. In the literature and related documents on the Japanese economy of this time, however, we find that most are dominated by the conventional view. Recent literature are the same. A simple, but basic question emerges immediately: "How have vital firms and industries grown in such a state assumed in the conventional view? and thereby How the industrial success has been attained?" Further, many talk about today's Japan depending primarily on the conventional view, implying both that it was effective for 1960s and that it still is effective today.

The conventional view of the Japanese economy is composed of two basic components.

(1) The view that the Japanese economic system or the economic system peculiar to Japan, associated with the following keywords, played a critical role: monopoly capital, finance capital, dual structure, exploitation, *keiretsu* loan, loan-concentration mechanism, corporate groups, Mainbank, *keiretsu* control, *keiretsu* transaction, subcontract [*shitauke*], subordination or dependence [*reizoku*], small business or small and medium firms [*chusho kigyo*], modernization, burden-shifting or using as a cushion [*shiwayose*], etc.

(2) The view that under the guise of "industrial policy" the Japanese government has used strong powers to intervene in (or guided and led) the private sector, which contributed much to the industrial success.

Neither is persuasive. In the first two Parts, I conclude that the Japanese economic system, which is a mixture of ill-defined terms and vague arguments based on shaky ground, is a false image distant from the reality. In Part III, I conclude that the industrial policy was ineffective and did not contributed much to the industrial success because its influence on the business activities has never been substantial.

It is a touchstone of accepted economics that all explanations must run in terms of the actions and reactions of individuals. It is my purpose to demonstrate that Japan has been for a long time a world of exchange by agreement rather than by coercion and that the standard economics principles explain the dominant patterns of Japanese economic phenomena. One point deserves attention here: it is only recently that many economists began to talk about the Japanese economy with the standard economics principles. Prior to the change, before the 1970s for instance, dreadfully dogmatic Germanic theory or Marxian economics dominated the talks about the Japanese economy. (Frequent use of the terms like monopoly capital and finance capital symbolizes this tradition.) They did not recognize economic phenomena as a result of exchange by agreement but by coercion. This dominance has a long history since the turn of the century, which is not limited in economics. It spread over not only to other fields of social sciences, such as political scientists, sociologists, and historians but also to outside academics, such as journalists, politicians, lawyers, and bureaucrats. Even business leaders shared the view when they talked not about their own business but the Japanese economy. Thereby it established the dominance and still remains as the conventional view of the Japanese economy. Because of the influence and memories of education in universities and high schools, even today most Japanese, particularly those who are over forties, hold strong sympathy with that theory.

For my purpose, the problem is twofold: (1) Most keywords invented in 1960s and used even today in talks about the Japanese economy are the product of this theory and reflect the view that economic phenomena are a result of exchange by coercion; (2) By using those words, many still accepts this theory, often unconsciously, in studying today's Japanese economy. Because of the second point, my argument faces a strong resistance from many sides, which, however, are seldom understandable. Because of the first point, most representative literature of the time on the Japanese economy in 1950s and 1960s are not understandable, either. They hardly explain why could coercion occur and how it worked, but <u>a priori</u> assume it. Dual structure is an example. As discussed in the next two chapters, many argue that there existed a social system named dual structure where small firm's freedom of choice was strictly limited and large firms exploited them, but never could I find a persuasive explanation of why it could occur.[1] In Chapter 3, I critically examine the persuasiveness of their

[1] Older scholars, probably over 40 years old, will remember the dual labor market models of people like Lewis and Ranis. People might study this dual sector development economics model, but they recognized the world as a result of exchange by coercion and could only borrow the expression.

argument, and instead show how competitive markets worked well and therefore economic phenomena could be explained as a result of voluntary choice of participants.

1-2. A Brief Overview of Japan's Postwar Economic History

Studies of Japanese economy abound, but few provide a good introductory overview. This is partly because interest in Japan's economy has intensified as its industrial success became well-known -- since the 1970s, especially in the 1980s. Interest in Japan is predicated upon a taste for the exotic and the expectation at home and abroad that Japan is and should be different from Western counties. Strong demand for the Japan-is-different-view has resulted in its supply by those with similar beliefs. As will be shown below, there are many stylized facts on Japan's economy, most of which are vague and ill-defined, supported with little firm empirical grounds. This book dissects misconceptions and lays out the facts about the Japanese economy. Before introducing my argument, we put two sections as a preliminary: first, an overview of Japan's economy and industry in the half century after World War II, and second, comments on three basic misconceptions of the Japanese economy.

As shown in Table 1-1 and 1-2, Japan's 1990 GDP was more than half of the U.S. and was larger than the remaining Group of Seven industrialized nations'. Japan's per capita income was the highest of the group. In 1980 the situation was almost the same. Even in 1970, just on the midway from 1945 to today, Japan's GDP exceeded that of all the G7 countries but the U.S., and per capita was catching up to that of Europe. In 1960, however, Japan's GDP was less than a tenth of the U.S. and slightly larger than that of Italy and Canada. Its per capita GDP was the smallest, only a third that of the U.K., Germany, and France.

-----Table 1-1, Table 1-2 -----

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Though Japanese per capita income grew fastest among G7 countries since 1973[2], its growth rate was higher still in the High-Growth Era of 1951-1973. Table 1-3 shows the five year average real growth rate of GNP between 1945 and 1980.

----Table 1-3 -------

The Japanese economy has grown at a remarkably rapid speed, not only since the war but also before. Between 1913 and 1929, for example, Japan's real per capita income increased 46%, compared to 36% growth over the same time period in France, the second fastest-growing country among today's G7 members.[3] As shown in Figure 1-1, only in 1957 did real per capita income exceeded the 1939 prewar peak. Total GNP topped the prewar level in 1954.[4]

-----Fig 1-1 -----

As shown in table 1-4, postwar Japan's industrial success is characterized as that of machinery industries, whose export ratio to total exports in 1970 was 46.3%, almost double the 25.3% of 1960, and four times the 10.5% of 1950.

----Table 1-4 -----

Rapid growth of machinery industries began in the prewar period; the ratio of machinery exports to total exports was already 13.0% in 1940. As shown in Table 1-5, production of machinery items peaked before the Pacific War and rose rapidly again after a wartime lull. Different products emerged

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[2] Level of GDP per capita in 1987 at 1980 prices is 47% higher than that in 1973, while 32% higher in Italy, the second fastest-growing country among G7 members. See, for example, Maddison[1989].

[3] See, for instance, Maddison[1989].

[4] Hence, the government's Economic White Paper in 1956 declares, "No longer are we in the postwar age," as mentioned at the outset of this chapter.

successively, starting with electric fans, sewing machines and binoculars, followed by cameras, radio receivers, monochrome TVs, and bicycles, clocks and watches, and then by motor cycles and three-wheeled trucks, ships, passenger cars, and various other kinds of electrical and industrial machinery.

-----Table 1-5 -----

The passenger car industry is one example of machinery's industrial success.[5] As shown in Table 1-6, Japan's total production in 1955 was only 20,000 when Toyota launched their first true passenger car, the Crown. Production grew to nearly 700,000 cars in 10 years, exceeded 3,000,000 in 15 years, and in 1971 more than 1,000,000 cars were exported.[6] As shown in Chapter 4, the basic features of today's automobile industry were clear before 1970.

----- Table 1-6 -----

Thus, by 1970 or the First Oil Crisis in 1973, the Japanese economy had grown to a size big enough to gather world wide attention. The average growth rate on the process was quite high, and per capita GDP was also catching up to that of Europe. At the same time, as symbolically shown in the figures for 1970, 46.3% in Table 1-4, the ratio of machinery exports to total exports, and 3,178,708 and 22.8 in Table 1-6, the number of Japanese passenger car production and its export ratio, the basic features of Japan's industrial success had become clear. The Japanese economy as a whole and each industry, particularly the machinery industries, grew

[5] Shipbuilding is another. Soon after the industry was freed from the restriction of reparations policy, exports increased explosively. Since 1956, Japanese shipbuilders have held the largest share in the world market, and in 1956 more than 70% completed tonnage were exported. See Miwa[1993, pp.143-44].

[6] For the details of this industry, see Chapter 4.

successfully in the next 25 years along the line of the success of the preceding decades.

In the first three Parts of this book, focus centers primarily on the High-Growth Era of 1951-73, particularly in 1960s, and this is the first reason of my choice.

1-3. Three Misconceptions and two supplementary misconceptions of the Japanese Economy

Talks on today's Japanese economy are full of misconceptions, on which not only political debates but also academic works heavily depend. Most of them prevailed in the 1960s, and survived even today often with a cosmetic change, like keiretsu loan to Mainbank relationships (see Chapter 5 and 6). Many people adopt them as stylized facts without a close examination of whether these facts have ever existed. They were misconceptions even in the 1960s. Many argue, for instance, that the industrial policy was tremendously effective in the 1960s, and that it is still effective although its effectiveness has decreased gradually. But it was ineffective in the 1960s, therefore it cannot be effective today. Thus, for an accurate understanding of today's Japanese economy, it is essential to understand the Japanese economy in the 1960s, for which a critical examination of the literature of the time is crucial. This is the second reason why my focus in the first three Parts centers primarily on these period.

A reader may be happy enough not to have any such misconceptions. But the world is full of talks and articles based, often unconsciously, on these misconceptions, and this happy reader has no way to defend herself against them, like a Red Riding Hood. Therefore, as a beginner's guide to study today's Japanese economy, I point out three basic misconceptions, the dominance of large firms, the dominance of corporate groups, and the effective industrial policy by the strong government. Also added two supplementary ones, the argument that all trade relationships are long term and exclusive, and the important role of cross shareholdings among firms.

I contrast a stylized misconception, denoted [Misconception], with the fact, [Fact]. I show what facts are, and why and how they are misconceptions. Introductory explanation is minimized, and the detailed discussion is in the part indicated in parenthesis.

The Dominance of Large Firms.

[Misconception. I]: Japan's economy is dominated by large firms.

[Fact. I]: Japan's economy is dominated by small- and medium-sized firms (hereafter, small business).

The first misconception is a mixture of three components: (1) Each large firm is really gigantic; (2) Large firms occupy the dominant portion of the Japanese economy; (3) Each large firm or group of large firms subordinate exploit many small business under keiretsu relationship. Therefore, their actual presence and power is much larger than their size, for instance, the number of employees, alone suggests. However, all these three are wrong.

Each large firm is rather slim. In discussing Japanese firms and industrial organization, most have in mind such firms as Toyota, Nissan, and Honda in the automobile industry and NEC, Hitachi, and SONY in electronics. Some may think that Toyota's unique "Just-in-time-(Toyota-)production-system" or "kanban-system" is common throughout the Japanese economy. A comparison of large Japanese firms and their American and European counterparts reveals that Japanese firms are rather slim and have far fewer employees in relation to sales.[7] Table 1-7 gives some examples. For example, in 1991 Toyota's annual sales amount to some 1/2 that of General Mortors and a third more than Volkswagen's, but Toyota employs (72,000) less than 1/10 the number of workers of GM (751,000) and less than 1/3 that of Volkswagen (266,000).

------ Table 1-7 -------

[7] For instance, see Komiya[1990, p.174].

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Small business occupy the dominant portion of the Japanese economy. Most Japanese firms are small, most Japanese workers are employed by small firms, and more than half of value added in the corporate sector is produced by small firms. Such dominance of small firms in Japan has a long history, and their share has not changed at least for these 30-40 years.[8] The total number of establishments in the whole private sector of Japan (not including agriculture and fishery) was 6.5 million in 1991, and 99.1% of them were small business. The total number of the employees there was 55 million, and 79.2% of them were in small business. Limiting our attention to the manufacturing sector, we find almost the same picture. There were 857,000 establishments in 1991, and 99.4% of them were small business. The total number of employees was 14.1 million, with 73.8% in small business. The corresponding figures in the manufacturing sector in 1957 were 99.6% and 72.3%, respectively, which suggest the stable predominance of small business. Throughout these 30-40 years, more than 55% of the value added has been produced in small business sector, and therefore less than 45% in large firm sector.[9]

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[8] This was recognized widely, for instance, by Patrick and Rohlen[1987, p.331]: "All too frequently big business has dominated popular perceptions of the Japanese economy. Large firms are deemed to have powered Japan's growth through their successes in generating output, raising productivity, absorbing and creating innovations through large-scale R&D, and creating and developing the 'Japanese management system' of industrial relations, internal decision making, and close intragroup affiliations....[However,] small enterprise is the economic, political, and social heart and backbone of Japan. In particular, small-scale family enterprises have long been and continue to be a large and dynamic element in the political economy of Japan."

[9] For details, see the tables in the appendix of <u>Chusho Kigyo Hakusho (White Pater on Small and Medium Enterprises</u>, annual; hereafter, <u>SME White Paper</u>). Here I use the 1965 and 1993 editions. These figures are originally drawn from "<u>Census of Establishments</u>" and "<u>Census of Manufacturing</u>." The standard definition of small business in Japan derives from Article 2 of the Small and Medium Enterprise Basic Law enacted in 1963, and depends on the type of industry. In manufacturing, mining, etc., it includes enterprises with ¥100 million or less in paid-in capital, or 300 or fewer employees. Figures are establishment-based, not company-based (e.g., a company with a head office and five factories is counted as six in establishment-based statistics, but one in company-based statistics). The total number of large firms in the manufacturing sector in 1986 was 3,739 in the establishment base and 3,263 in the company base. Also, the number of firms with more than 1,000 employees was 679 in the establishment base and 673 in the company base. Do not allow these small differences between the corresponding figures to trivialize the distinction between establishment- and company-based data.

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The profit rate of small business has been much higher than that of large firms, and the number of small business has constantly increased (see Table 2-1, and Table 3-1.) It implies that neither subordination nor exploitation of small business existed even in the 1950s and 60s, and that many new entrants have found the business promising.

The position of large firms in Japan's economy is symbolically illustrated by the following figures on the largest firms. In 1984, the largest 100 firms accounted for 20.7% of the total assets of the Japanese private non-financial sector. There has been a weak downward trend since 1967 when the percentage was 25.6%.[10] When the subsidiaries of these 100 firms (those with a shareholding of more than 50%) are included, the 1984 figure increased to 24.8%. The corresponding 1984 figure in manufacturing was 33.0%, and there also has been a downward trend since 1967 when it was 37.2%.[11] As shown in Scherer and Ross [1990, p.63, Table 3.3], the 1985 employment of Japan's top 10 and top 20 leading companies' as a percent of total industrial employment was 7.3% and 9.9%, respectively, remarkably lower than respective figures for the second ranking the U.S. of 13.1 and 18.6%.

The Dominance of Corporate Groups

<u>[Misconception. II]: There is a small number -- say, six -- of corporate groups (kigyo shudan). Mitsui, Mitsubishi, and Sumitomo are the representative. Member firms of each group form a tight organization and take concerted action, as if each member is a division of the whole. A large bank is at the core of each group and has a close</u>

[10] Data from Fair Trade Commission [1986]. A comparable figure was available since 1967. The corresponding data for capital stock shows that the downward trend began at least in 1963 and that the concentration ratio in 1953 was at the same level as that in 1971.

[11] In the U.S. the percentage was higher and there has been a upward trend, as shown in Scherer and Ross[1990, p.63, Figure 3.1]. An upward trend is clearer in the U.K. See Hannah[1983, p.92, Figure 7.1], with figures calculated from net output data.

"Mainbank" relationship with the other members. Those corporate groups dominate the Japanese economy.

[Fact. II]: However "corporate group" is defined,[12] the number is greater than six. No group of this type was tightly connected, or took such concerted action, particularly in making management decisions, even in the 1960s heyday of the corporate-group-view. The role of Mainbank is exaggerated. The dominance of those corporate groups in the Japanese economy is an exaggeration, too.

Part II of this volume is entirely devoted to the analysis of the issues related to this misconception. What follows is an overview of seven aspects of this larger issue, each of which is quite ill-defined: the historical importance, the role of the presidents' meeting (shacho-kai), their dominance in the capital market, Mainbank's monitoring funct3ion, large bank's role as the head of a corporate group, their dominance in the Japanese economy, and the argument that the system of corporate groups and Mainbank is the secret of Japan's industrial success.

Many argue that the number six is of historical importance, for "Six Major Industrial Groups," descendants of the prewar zaibatsu, dominate the Japanese economy. Only three of "Six Major Corporate Groups," Mitsui, Mitsubishi, and Sumitomo, are usually regarded as ex-zaibatsu. The other three have no such historical background (see the second part of Section 7-2 below).

The presidents' meeting (shacho-kai) is often recognized to function as the headquarter of each group. No evidence is available to evaluate the role of these meetings, but, they are said to occur only once a month for two hours. The common sense view is that one hour is for lunch and general conversation and the other is for a lecture often invited from outside the group. Member firms in each group in 1990 ranged between 20 and 47 (32 on average), too many for complicated business talks. The starting date of

[12] On the definition of "corporate group," see the first part of section 7-2.

these meetings ranges between 1951 and 1978, with a median 1963, 18 years after the end of World War II (see Chapter 7, especially Table 7-1).

It is widely believed that six large banks (Mitsui, Mitsubishi, Sumitomo, Fuji, Sanwa, and Daiichi Kangyo), one at the heart of each major corporate group, dominate Japan's capital markets. Japan has a wide variety of financial institutions. In 1963, for instance, there were 13 city banks (including the six banks noted above), 65 local banks, 7 trust banks, 3 long-term credit banks, in addition to many smaller institutions, including 17,042 deposit taking post offices. The thirteen city banks together held 41.8% of the total assets of private financial institutions.[13]

Many argue that in Japan, each firm has a Mainbank which monitors the firm as a representative of other lenders and plays a central bail-out role when the borrower falls into a state of insolvency. Clear definition of the Mainbank and hard evidence for its activity do not exist, making debate impossible. Whatever your definition of a Mainbank may be, see the last two sections Chapter 6.

It is often believed that each large bank functions as the head of a corporate group subordinating other member firms with loans, shareholding, and seconded directors, for which such terms as <u>keiretsu</u> control and <u>keiretsu</u> relationship are used. A large firm usually borrows less than 20% of its total needs from one bank (see, for instance, Tables 6-5 and 6-6), and borrows from that bank's competitors as well. Anti-monopoly law limits shareholding by a bank to five percent of any firm, and well-run firms usually have no directors seconded from or controlled by outside stakeholders such as a Mainbank acting as a monitoring agent (see Chapters 6, 7, and 11 for details).

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[13] Bank of Japan, <u>Economic Statistics Annual</u>, 1963. Assets of security companies and post offices are not included in the denominator. The phrases "city bank" and "local bank" are colloquial, not legal, terms. Both city and local banks are established under the same provisions of Banking Law, and both have the same legal status and usually called "ordinary banks." All six banks associated with six corporate groups are city banks. Their average size is larger than that of local banks, though the largest local bank is larger than the smallest city bank.

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"Six Major Corporate Groups" are regarded to dominate the Japanese economy. Their presence is exaggerated. Taking the presidents' meeting members as defining a corporate group, of the whole Japanese economy in 1990 the six group (excluding banks and insurance company members) accounted for 13.6% of total assets, 15.2% of sales, 13.7% of income before income taxes and extraordinary items, and 4.1% of employment. The number of employees of all member firms in three ex-zaibatsu groups -- Mitsui, Mitsubishi, and Sumitomo -- was 637,000 (see Tables 7-1 and 7-2), fewer than the 751,000 of General Motors (see Table 7-1). As pointed out in Chapter 7, however, aggregating the individual firms' figures is hardly justifiable.

It is often insisted that the system of corporate groups and Mainbank relationships are the secret of Japan's industrial success. Its importance is exaggerated. Even where the conventional view of corporate groups and Mainbanks are justified, their contribution to Japan's industrial success remains an open question. At minimum they generate "distortions" in the economy. Japan's industrial success is so remarkable that many tend to search for unique institutions and arrangements and make illogical conclusions, ignorant of the <u>post hoc, ergo propter hoc</u> fallacy (see Part II).

The Effective Industrial Policy

<u>[Misconception. III]: Under the guise of industrial policy, one of the main engine of industrial success, the Japanese government has used strong powers to intervene in the private sector.</u>
<u>[Fact. III]: The strength of state powers of intervention is a matter of definition. Outside regulated industries, the government intervenes rarely, however, and the net contribution of industrial policy to Japan's industrial success is negligible.</u>

The third misconception is composed of five parts: A big government, the government organization suitable for a "targeting policy," A strong government like those in socialist countries, the magnificent capability of the government to beat the market, and a big contribution to Japan's industrial success. All are examined in Part III of this volume, which is entirely devoted to industrial policy. Note that the effectiveness of industrial policy is not a black-and-white affair, but a "grey" matter to varying degrees.

Many believe that Japan is highly bureaucratized and has a big government. Whether Japan is bureaucratized is a matter of definition, but its government is small in terms of both budget and the number of government employees per capita. As Pempel and Muramatsu[1993, p.20] state,

> despite the fact that Japan is often thought of as a bureaucratized country, it actually has fewer public sector employees per capita than most other major industrialized countries . . . [G]overnment employees represent approximately 15-20 per cent of the total employment of the United States, France, Germany, and Britain; in Japan the figure is only 7.9 per cent.[14]

Furthermore, as a result of a series of administrative reforms, "there has been almost no substantial growth in the number of Japan's national civil servants over the last three decades."[15] They also point out that Japan maintains "the lowest cost government among the industrialized democracies as a per cent of GNP" (p.34). Japan's 1990 ratio of public expenditure to GDP was 32.4%; in the U.S. the figure was 36.1%, in France, 49.9%, in Germany, 46.0%, and in the U.K. 42.1%.[16]

Many argue that the Japanese government selects a group of industries of strategic importance. It designates an organization which is responsible

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[14] Figures in 1990 are 15.5 % in the U.S., 22.6 % in France, 15.2 % in Germany, 19.1 % in the U.K., and 7.9 % in Japan. See Table 1 of Pempel and Muramatsu[1993, p.43] whose source is OECD report, Public management Development, Annex, 1991, p.74.

[15] It continues: "At the same time, there has been a substantial devolution of activities to local government levels. The number of local civil servants increased from about 2.94 million in 1975 to 3.22 million in 1990" (p. 21).

[16] OECD, 1993. Public Management, p. 352. US figures are from 1989.

for each industry and concentrates its effort in their development. With this characteristic, it is called a "targeting policy." Since the Meiji Era, almost every industry has had a government counterpart which devotes all its efforts to protecting, encouraging, and supporting the firms in that industry. Examples include the steel industry section of the Ministry of International Trade and Industry (MITI) and the Securities Bureau of the Ministry of Finance (MOF). Almost all industries are systematically and continuously protected and supported by the government (see Chapter 8). Problems arise from the fact that nobody can protect and subsidize everybody. The vast number of small business has meant, for example, that policy developed by MITI's Small and Medium-sized Enterprise Agency (SMEA) has been indiscriminate and thinly spread, as detailed in Chapter 3. Furthermore, targeted policies can be implemented only over the strong objection of the government sections and industries which are not targeted.

It is often supposed that the Japanese government, like those in socialist countries, can intervene freely in the private sector and achieve almost all its aims. In postwar Japan, the government has never had such influence. Government power ebbed through gradual "liberalization," and attempts to strengthen it have almost always failed. Today, as in other developed countries, government influence is strong in regulated industries like energy, transportation, communication, financial intermediation, and agriculture. However, state influence is weak in other industries, including most of manufacturing. Pressure to open the Japanese market mounted sharply toward the end of 1950s.[17] In June 1960, the Cabinet decided on a "Trade and Exchange Liberalization Plan," and Japan's import liberalization

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[17] Japan was admitted as a contracting party of GATT in 1955. Around 1960, the major West European countries reestablished their currency convertibility and became IMF Article 8 (which forbids a member state from restricting payments and transfers for international transactions on current account) and GATT Article 11 members (such states are forbidden to use quantitative restrictions on imports for balance-of-payments reasons). Lagging only a few years behind, Japan embarked on a liberalization of import restrictions and foreign exchange controls, and became GATT Article 11 member in 1963 and IMF Article 8 member in 1964. Also in 1964, Japan acceded to OECD, which requested Japan to liberalize inward direct investment (the "capital liberalization"). For details, see Komiya[1990], Chapter 1, esp. pp. 8-17.

greatly expanded in the first half of the 1960s (for details, see Komiya[1-990], Chapter 1). During the process of liberalization, MITI provoked the "New-Industrial-Order-Debate" and attempted to strengthen its power in vain by enacting the Special Industries Law.[18]

Even when the law empowers the government to intervene in the private sector, it is often reluctant in using it. This point is developed in Chapter 10, where the case of the Petroleum Industry Law is examined in detail. The Law permits the government to intervene individual refiners' decisions on production levels, pricing, and investment. In the Idemitsu Incident of 1963, MITI officials and the Chairman of the MITI's Petroleum Council tried without success to elicit Idemitsu's cooperation in output coordination. The case suggests four points: (1) even when the government has strong powers, "self-coordination (coordination by themselves)" is normally chosen by the government as the basic approach to conflict resolution; (2) only when self-coordination fails does government intervene; (3) for government participation to achieve its goals, the active cooperation of the relevant firms is essential; (4) even when the government uses its power to coordinate private sector activity, it is not easy to actually attain its goals.

Many assume, often implicitly, that the government can beat the market at selecting industries and targeting resources to them. But no evidence has ever been shown for this assumption, making debate impossible. In Japan and among Japanologists abroad, this argument, often called a "signalling effect" view or a "cowbell effect" view, is popular. The same type of magnificent capability is assumed on the government in selecting industries for "targeting policy," in selecting small businesses for small business policies, and on Mainbanks in selecting borrowing firms, where because of this capability the government is assumed to beat the market by inducing the private firms through policy intervention. This is almost

[18] The law is officially titled the Law on Extraordinary Measures for the Promotion of Specified Manufacturing Industries. For the debate and this law, see Tsuruta[1988, pp.63-70]. For historical background, see Chapter 8 of this volume.

equivalent to suggesting that the centralization of the economy improves efficiency, and also is close to the "Japan-Inc.-view."[19] These arguments are still open to a careful investigation, especially with a series of collapse of socialist economies since 1989. Note that in Japan, strongly regulated industries are notoriously poor performers.

Industrial policies is widely believed as the engine of Japan's industrial success. To test this assertion, we should conduct careful investigation on the net contribution of industrial policy to Japan's industrial success. Because government intervention generates "distortions" in the economy, the key question is not whether industrial policy had positive impact but whether the benefit covered its cost. (As will be shown in Part III, it neither had positive impact nor covered its cost.) To repeat an earlier assertion, Japan's industrial success is so remarkable that many tend to search for unique institutions and arrangements and make illogical conclusions, ignorant of the <u>post hoc, ergo propter hoc</u> fallacy.

Two Supplementary Misconceptions

> <u>[Misconception. IV]: In Japan, trade relationships are long-term and exclusive; therefore it is hard to begin business with new partners or enter new markets. Foreign firms feel this constraint strongly.</u>
> <u>[Fact. IV]: Trade relationships in many fields probably do have a long-term character. However, such relationships are not strongly exclusive, as evidenced by the many new entrants and competitive markets in Japan over the postwar period. Thus, long-term relationships are not the main factor constraining the success of foreign firms in Japan. As in other countries, not all new entries succeed, and foreign firms are not the only firms to fail in Japan.</u>

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[19] See, for instance, the fifth comment in Section 6-6 and Chapter 6, note 74.

Many assert that the cooperative association of first-tier suppliers to Japan's automobile assemblers (kyoryoku-kai) are exclusive. Toyota's kyoho-kai is a notable example. As discussed in the second part of Section 4-4, in 1987, 45 of 162 kyoryoku-kai members of Nissan, Toyota's arch-rival, also belonged to Toyota's kyoho-kai.[20] Many suppliers, like Akebono Brake, Ichikoh Industries, NOK, Kayaba, Koito, etc., belonged to kyoryoku-kai of Big 5 (Toyota, Nissan, Mazda, Mitsubishi, and Honda) and other assemblers, and even Nihon Denso, the biggest car parts manufacturer in Japan, of which Toyota held 23% of the share, belonged to kyoryoku-kai of all assemblers except Nissan. As discussed in Chapter 12 of this volume, especially in Section 12-9, the predominance of stable, long-term interfirm relationship with a non-exclusive characteristic is one of the most striking and important peculiarities of Japanese industrial organization.

[Misconception. V]: Most large Japanese firms are controlled by a group of directors and managers who are relatively independent of shareholders. Independence is assured by cross shareholdings (mochi-ai) by a group of stable and friendly shareholders (antei kabunushi), who may be other member firms in a corporate group. The antei kabunushi as a group hold the majority of stock in particular firms, and are loyal to the firm's directors. The power of other shareholders is consequently weak, and Japanese capitalism is therefore different from that in Western countries. However, after the collapse of the recent "Bubble economy" has meant the diminution of cross shareholdings, and convergence with the western standard.

[Fact. V]: Though definitional problems remain, especially as to the meaning of "control," many large Japanese firms are controlled by a group of directors. It is because not of cross shareholdings, however, but an outgrowth of the mechanism of organization. Antei kabunushi remain shareholders and choose to support the present directors, but the extent of their power is open to question. Whether Japanese

[20] Some of these firms are listed in Chapter 4, note 53.

capitalism differs from western variant is another question, and whether cross shareholding is diminishing is yet another.

Many hold this misconception in spite of, or even because of, its extreme ambiguity. For the details, see Chapter 11 of this volume. Antei kabunushi are still shareholders and no change has occurred in their legal position. As large shareholders, antei kabunushi can easily "control" the firm's decision making if they decide to behave collusively, and, for example, dismiss the board of directors. The fact that we observe no such case of collective action suggests that antei kabunushi choose to support the directors because it is profitable to do so. The power of directors comes first, and antei kabunushi are selected because they are supposed to be friendly to the directors. When once friendly large shareholders threaten the present management, the directors change their selection of the friendly shareholders. Cross shareholdings or group shareholdings (e.g., among "corporate group" firms) are but a result of voluntary choice. Whether the organizational mechanism empowering to the board of directors is peculiar to Japan is another question. On the significance of shareholders' power in the American corporation, Alchian and Demsetz [1972, p.789] state:

> instead of thinking of shareholders as joint owners, we can think of them as investors, like bondholders, except that the stockholders are more optimistic than bondholders about the enterprise prospects."[21]

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[21] Note the view in "Now's the time to buy German," Financial Times, 9 November 1993:

> The key to opening successful negotiations is to understand the mentality of the seller . . . [T]his is likely to be very different from that of the typical buyer, an Anglo-American manager working for a stock-market listed company. The most important thing to know is that money is not everything for the owner of a German private company . . . [I]t can be an insult to try to persuade him to talk by promising an excellent price . . . Loyalty to the company he has built up over decades, to the community in which it is based and in which he lives and to the workforce are likely to be more important. Any proposal

Whether cross shareholdings are in the process of diminishing is not apparent.

1-4. Part I. SMALL BUSINESS AND DIVISION OF WORK

Part I focuses on Japan's small business or small and medium-sized firms (hereafter, small business), especially before 1970. This is for five reasons. First, as shown above, Japan's economy has been dominated by small business. Second, Japan's industrial success depends more than anything else upon the success of machinery industries, especially those specializing in the fabrication and assembly. As I will mention in detail below, in these industries small businesses have played essential roles within supplier-assembler relationships for division of labor, called subcontracting (shitauke). Third, in focusing small business, I take issue with the conventional dual structure view, which asserts that, at least before 1970, small business were exploited and suffered from large firms' burden-shfting (shiwayose). By way of questioning this view I ask: (1) How could such exploited small businesses play essential roles? (2) How could exploited small businesses become as active and creative as they did? (3) Why did exploited small businesses increase both in number and production capacities rather than disappear? (I discuss these questions in Chapter 3.) Fourth, stress on small business allows investigation of the common view that even if large Japanese firms are actually rather slim and their total share of employment rather small, they subordinate many small businesses under keiretsu relationship [this term is too vague to define here. See below] and therefore have a greater presence than their size alone suggests. Fifth, focus on small business also calls into question the role of the government policy, for if Japan's success depends on small business,

with an opportunistic, asset-stripping flavour is likely to be given short shrift . . . [T]he owner will feel the company is likely to be destroyed, with disastrous consequences for his standing in the local community.

industrial policy must have contributed much. I shall examine whether this has been the case.

I focus on the period before 1970 for three reasons. First, as mentioned above, Japan's GDP in 1970 already exceeded all other G7 countries but the U.S., and per capita income was catching up to that of Europe. Before 1970 the growth rate was much higher and the growth process more dynamic than after. Japan's economy expanded after 1970, but only on the basis of earlier development. Second, the conventional understanding of Japan's economy prior to 1970 is symbolized with two terms, Dual Structure and Monopoly Capital (or Keiretsu). Support for the dual-structure-view weakened significantly by 1970, but most of the keywords of the time are still used in analyzing the Japanese economy today. I argue that their continued usage is a source of misunderstanding and confusion about today's Japan. In studying small business before 1970 I ask: Why and how did the dual structure collapse? Who destroyed it? What was the role of the government? Was the dual-structure-view right? Third, as Chapter 4 details, in 1970 the Japanese automobile industry, a symbol of Japan's industrial success, manufactured more than three million passenger cars and exported nearly one million. In fifteen years, production had grown from 20,000 units, and the basic features of today's car manufacturing system had become clear. Thus, the development process of this industry by 1970 is worth attention.

The core of Part I is Chapter 4, where I examine the formation and workings of the interfirm relationships for division of labor, the supplier-assembler relationships or subcontracting relationships. First, however, two chapters are devoted to debunking some common myths, since small business and their relationships with large firms are so deeply misunderstood. Chapter 2 is the gateway to Part I and with it the whole volume. Focus is on the concept of dual structure and its validity, which I test by comparing the profit rate of large firms with that of small business. Under dual structure assumptions, large firms must be in an advantageous position relative to small business, and therefore should enjoy significantly higher profit rates. I show, however, small business profit rates were double those of large firms, and conclude that the dual structure view of the economy before 1970 is totally wrong. By implication, policies enacted on the basis of such faulty analysis (including policies for small business) and current views of the Japanese economy that rely on the dual structure conceptualization are also misguided.

Chapter 3 answers the three questions listed above related to the third reason for why in Part I I focus on Japan's small business. I expand the conclusion in Chapter 2 on the details of the conventional view of dual structure, and closely examine the reality of small business and the effectiveness of policies for them before 1970 when the dual structure was thought to dominate Japan. The dual-structure-view is ill-defined, and it basically recognizes Japan as a world of exchange not by agreement but by coercion. Detailed refutation of the conventional view will be helpful for understanding the reality of small business and the role of policies for them. Two propositions follow the discussion: (1) a wide gap has existed between the image and reality of small business since 1950s; (2) the image of small business has changed more radically than the reality. Thus, the problem that small business policy was ostensibly designed to address did not exist. Therefore, if the elimination of the "dual structure" is the standard for measuring the effectiveness of small business policy, the policy could not have been effective. So many new small businesses continuously started operations simply because entrepreneurs found the business promising. Neither miracle nor particular environmental factors peculiar only to Japan, like history and culture, for small business have existed. Chapter 3 also includes a critical review of the literature on small business and a detailed introduction to Japanese small business policy. There has been no miraculous small business policy, either.

Chapter 4 examines the formation and mechanism of supplier-assembler relationships or subcontracting relationships in the Japanese automobile industry. I ask two questions: (1) Under what incentives have suppliers, particularly small business, joined and maintained their commitment to the relationship? (2) How has the system functioned? Supplier-assembler relationships in this industry are quite often long term, implying that participants commit in offering a kind of monopolistic position to the partner. How each participant has protected itself from the evils of monopoly is a third critical question. Because of its success, readers often assume that the automobile industry was powerful and efficient from the start, and lack knowledge of the history of its development and success. Long sections are devoted to a critical review of the academic literature, industrial history, and common misunderstandings of both.

Even if impressed by the description of the Japanese automobile industry, do not mistake its message: Decentralization and the division of labor among independent firms is not effective everywhere, Toyota's production system is not easy to imitate and not the way to success for everybody. Part IV focuses again on organizations and interfirm relationships.

1-5. Part II. FINANCIAL MARKET

The three chapters in Part II investigates the loan-concentration-mechanism, Mainbanks and corporate groups, all facets of the conventional view of the postwar Japanese financial system. I conclude that the importance placed on by the conventional view is wrong not only today but also for the period before 1970, when the dual-structure-view was dominant. Coupled with the conclusion in Part I, this implies that the first basic component of the conventional view of the Japanese economy, the view that the Japanese economic system or the economic system peculiar to Japan played a critical role for its success, is totally wrong. Probably because of the dominance in Japan of dogmatic Germanic theory, mentioned above, the literature and talks on the Japanese economy has been predominated by those focus on financial factors, such as financial phenomena like loans and shareholdings, financial institutions like banks, and financial markets like loan markets and stock markets.

The loan-concentration-view is a component and for some the basis of the dual-structure-view. Loan concentration is directly related to small business, which have dominated the Japanese economy. Accordingly, Chapter 5 is the most important Chapter in Part II. The loan-concentration-view asserts that a de facto mechanism in the Japanese financial sector targeted loans to large firms rather than small business, thereby harming the financial interests of small business. Such discrimination, called Keiretsu loan, is supposedly more clear during periods of tight money policy called burden-shifting or shiwayose. In Chapter 5, after showing why the loan-concentration-view is inconsistent with reality, I review both the theory and evidence for the conventional view, and conclude that the loan-concentration-view is wrong.

While Chapter 5 focuses on small business, the next two chapters investigate the relationship between financial markets and large firms, the alleged beneficiaries of burden-shifting. The loan-concentration-view argues that large banks dominate the Japanese financial market and each large bank has special relationship, an "adhesion relationship," with a group of large firms toward which it directs loans (Keiretsu loan). The Mainbank-view argues that Japanese large firms have special long-term relationships, called Mainbank relationships, with one or more large banks, and that these pervade Japanese financial market and therefore influence Japan's industrial organization. Each large bank has such relationship with a group of large firms, and the corporate-group-view asserts that these groups are important for understanding the Japanese economy. In reading Chapters 6 and 7 keep in mind that the firms under consideration are large and occupy a small portion of the Japanese economy. (Recall that even when we count all the firms with more than 300 employees as large firms, they employ only 25% of the manufacturing workforce.)

Chapter 6 is almost a direct translation of a 1985 paper. (In the last two sections of the chapter, I comment on more recent literature on the Mainbank relationship.) In Chapter 6 I argue that the phenomena predicted by proponents of the Mainbank-view for the decade preceding the mid-1980s are not in fact observed. In this respect I find that the Mainbank-view resembles the dual-structure-view: both are asserted and supported without clear definition or evidence.

Readers who accept the arguments up to Chapter 6 need not read Chapter 7 on corporate groups. Though corporate groups, and keiretsu are common parlance, the terms are seldom used with precision. In Chapter 7 I focus on the six major corporate groups, such as the Mitsubishi Group, the Mitsui Group, and the Sumitomo Group, etc. Recent studies in English distinguish three types of corporate groups or keiretsu;[22] of these, we study "production" or "vertical" keiretsu in Chapter 4. A brief note on "distribution" keiretsu is given in Chapter 12, and "horizontal" keiretsu are treated in Chapter 7. Like the concepts of a Mainbank and dual structure, the corporate-group-view suffers from poor definition and little evidence. Many instead simply conflate today's corporate groups with the prewar zaibatsu. They take the importance of firm's collective decisions and actions for the common goal as obvious, which makes empirical investigation difficult.[23]

Since there is no agreement on the definition of the corporate-group-view, I take Miyazaki [1976] as an illustrative representative, show what the view amounts to, and explain why I never take it seriously. I entitle the chapter "An Anatomy of the Corporate-Group-View," instead of "Analysis."

As basic information for Part II, note the following. First, the number of financial institutions has not been large, as mentioned above in Section 1-3. Second, even a large firm with close long-term links to one large bank does not borrow a very high ratio of its total borrowing from that bank. As will be shown in Chapter 6, such big keiretsu borrowers as general trading companies and real estate companies in the 1970s borrowed less than 20% of their total needs from their Mainbank. Third, small

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[22] For example, see Lawrence [1991a, 1991b]. The term keiretsu is used in English to refer to a variety of organizations or economic phenomena with various Japanese names, making the analysis of corporate groups all the more confusing. The use of the term in English corresponds to a wider range of phenomena than the same Japanese term.

[23] Readers will realize that such conflation leads easily to the "Japan Inc." view, a generalization from perceptions of zaibatsu interests and operations.

business also borrow from large banks. As will be shown in Chapter 5, between 1963-1965, 35.6% of total borrowing by small business in manufacturing came from city banks and another 26.0% came from local banks.[24]

1-6. Part III. INDUSTRIAL POLICY

Part III focuses on the role of the government, particularly the "industrial policy," and examine the validity of the other basic component of the conventional view of the Japanese economy: the view that under the guise of industrial policy the Japanese government has used strong powers to intervene in the private sector, which contributed much to the industrial success. As mentioned in Section 1-3, this is one of the three basic misconceptions of the Japanese economy. Like other technical jargons invented for talks on the Japanese economy and critically reviewed in the previous chapters, neither clear definition of nor wide agreement on the concept of "industrial policy" exists. As a result, under the title of "industrial policy" many have talked about different matters. They discussed the effectiveness of industrial policy, caring little for the difference. For supporters of the "Japan-is-different-view," and the "Japan-Inc.-view," the importance of industrial policy is so obvious that they simply search for episodes and anecdotes consistent with it. Accordingly, they tend to include a wider group of policy measures in the industrial policy. Moreover, because of the Japan's impressive industrial success, many tend to search for something peculiar and make illogical conclusions, ignorant of the post hoc, ergo propter hoc fallacy.

To ask Can industrial policy be effective in promoting the growth of the economy? is almost the same as asking Can the government do anything for the economic growth? The answer to these questions is "probably yes,"

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[24] These figures are the three years average (Bank of Japan, Financial Statements of Small Business in Japan, annual), and small business here are firms with 50-299 employees. Corresponding figures for large firms are 66.4% and 10.3% (Bank of Japan, Financial Statement of Principal Enterprises in Japan, annual). However, for large firms "city banks" include long-term credit banks and trust banks, whereas small business figures do not.

but they are too general as a policy recommendation. Critical questions are How can the government promote the growth? and Under what conditions can it be effective? Thereby Japan's industrial policy gathers a wide attention. But, whether Japan's government policy contributed much to its rapid growth is another question. For this we have to carry out a carefully designed empirical examination. In reading the argument below keep in mind that the effectiveness of industrial policy is not a black-and-white affair, but a "grey" matter to varying degrees.

A wide variety of topics on industrial policy are discussed at once, and two questions have to be distinguished: (1) What the government should do for industries to promote the growth and productivity increase of the economy? (2) What it could do and actually did for that purpose? Many talk about market failures as the basis for industrial policy and search for episodes and anecdotes as evidence for its effectiveness, often backed up by the bureaucratized-Japan-Inc.-view. However, as Stigler [1975, p.113] pointed out, "We may tell the society to jump out of the market frying pan, but we have no basis for predicting whether it will land in the fire or a luxurious bed." Besides, policies are formed and carried out through the political process, and ideal policies, the answer to the above first question, will not be necessarily chosen with four reasons. First, the government may not follow the target. It may prefer "equity" to "efficiency."[25] Second, the government may not have capability to beat the market, thereby, not only the market but the government fails. As revealed by a recent collapse of socialist economies, the centralized economy is too complicated to be efficient. Third, environments function as strong restrictions to policy choices. For example, Japan's administration system unescapably results in indiscriminate policy decisions. As shown in Chapter 3, the government, with broad public support and enthusiastic political backing, has put much emphasis on policies for small business. But it has been so thin and indiscriminate to be effective. Fourth, the government has

[25] In Japan, for instance, farmers, small business, and retailers have had strong political powers and used them to get policies for them.

neither strong powers to choose freely the ideal policies nor strong trust and support from firms and the public to have them follow the government.

Chapters 9 and 10 are the core of Part III, where I investigate the details of one type of "industrial policy," that for coordination within industry, particularly that for equipment investment coordination, mainly before 1970, so-called the heyday of industrial policy. I closely look at what occurred in the industry and how the government intervention influenced individual firms' behavior and industrial performance. Chapter 9 is a detailed case study of the equipment investment coordination in the steel industry. Chapter 10 is a generalization of the conclusion of Chapter 9 into three types -- output, price, and investment -- expanding reference also to the oil refining. Chapter 8 is an introduction to these two Chapters, where I explain the historical background of the policies for industries in the 1960s and list up several points for beginners to learn Japan's industrial policy.

Chapters 9 and 10 focus on the above mentioned second question, which is purely empirical. Coordination within industry and related policies have three characteristics. First, it need not money, and can be carried out without outside budgetary check, for example, by the Diet and the Ministry of Finance. Second, it is essentially a cartel promoting-and-supporting policy. Therefore, it was for the interest of the majority of incumbents, and was the most popular type of policy intervention toward industry. Third, as discussed in Chapter 8, the central issue of the "New-Industrial-Order-Debate" around 1960 was on the role of this type of intervention, where MITI attempted to strengthen its power by enacting the Special Industries Law in vain. I focus on policies in the 1960s, since it is the heyday of industrial policy.[26] I conclude that the role of the policy and its contribution to Japan's industrial success even in the heyday was negligible, if any.[27] The government has lost the power step by step with

[26] See, for instance, Komiya[1988, p.13] and Tsuruta[1988, p.82].

[27] Tsuruta [1988, p.80] evaluation of industrial policy in the High-Growth Era, for instance, is basically the same: "The goal of government policy was to bring about a concentration of production and the formation

a series of "liberalization," which suggests that this conclusion also applies in the 1970s onward.

In reading Part III, note four points. First, I do not discuss "targeting policy" in 1970s, for instance, and whether my conclusion also applies to such cases is another question. My argument below, however, suggests that the factors conditioning policy for "coordination within industry" also applies to industrial policy in general. For this, one has to examine carefully whether none of such factors as the characteristics of administration system, the government's capability, and its power has functioned as a restriction on its effectiveness. Be careful not to simply search episodes for "successful targeting policy" on the assumption that it was successful. The next question for those who believe it successful is, "Why has it occurred in Japan, not in socialist economies where the government has much stronger power?" Some may comment that Japan's R&D policy has made a great success, referring to the VLSI Technology Research Association. But this is also an example of searching for an episode on that assumption. As Wakasugi [1986, pp.146-66, especially p.163] pointed out, this case was rather exceptional, and on average, research associations established on the same law (the Mining and Manufacturing Technology Research Association Law enacted in 1961) were not productive and efficient.

Second, focus centers on the role of the government policy, which requires a careful identification of policy effect. Many talks about industrial policy without caring for this point, which results in an overvaluation of the effect. Quite often firms talk about a cooperative action by themselves and then ask the government (their counterpart) to take a guise of "policy." In these cases the role of the government is only a veil, but many tend to include all related individual firms' actions into the policy evaluation. As shown below, in the cases of cooperation within

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of an industrial structure of specialized manufacturers. This was done with the aim of improving international competitiveness in advance of the opening of the economy, but one cannot say that the policy was successful."

industry, the role of the government was almost always passive and marginal. My negative conclusion is composed of two parts: (1) the government played a minor role; (2) trials for coordination did not last long and had no serious effects on individual firm's behavior. Thus, I conclude that the sum of the effect of policy and that of individual firm's coordinating behavior was negligible.

Third, why Japanese industrial policy was ineffective is another question. The reasons must be multiple, such as the characteristics of administration system and the powers of the government. Even when the government could overcome most of them, the capability of the government must be the final barrier as the history of socialist economies proved. In the long-run any ideal government will not be able to beat the market, I believe.

Fourth, "industrial policy" is not peculiar to Japan. Whatever the title is, government intervention to industries were more usual and stronger al least in socialist economies than in Japan. Also, the term "industrial policy" was so popular in the U.K. in the 1910s and 20s as to publish a government report in 1918, "Committee on Commercial and Industrial Policy after the War, Final Report,"[28] for instance, and Japanese term "sangyo seisaku (industrial policy)" was a translation in the 1960s of a French term, "politique industrielle." It was the Prime Minister of the U.K., Mr. John Major, who made the following speech at the CBI Annual Dinner on 18 May 1993:

> You create the world class companies. But in a thousand ways, the decisions that we take in Government can help you or hinder you. So we, too, are part of Britain's competitiveness. All our policies - not just our economic policy - need to be focused on the future strength of the British economy.

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[28] The committee "stressed the benefits of the activities of combinations and were impressed by the need for large-scale organization to meet German and American competition." See Hannah[1983, p.43]. The Japanese government expressed just the same view in the 1960s.

[Macintxx.miwa]

1-7. Part IV. INTRAFIRM ORGANIZATION AND INTERFIRM RELATIONSHIPS

Part IV focuses on intrafirm organization and interfirm relationships in Japan. In the preceding Parts, I assumed a neoclassical firm as the basic decision unit: a firm in the real world behaves like a neoclassical firm; shareholders control the firm; directors make decisions as an agent of shareholders; it purchases other factors of production than "capital" in the market; and its behavior can be explained as maximizing profit under given constraints, such as production function and demand conditions. Also assumed that a firm is like an iceberg floating on the sea, called the market, implicitly assuming, too, zero transaction costs unless otherwise stated. Everybody knows, however, that once we are interested in the formation and workings of each firm, interfirm relationships, and the market, we need a close examination of the validity of these assumptions. For the study of intrafirm organization and interfirm relationships in Japan, it is indispensable.

The predominance of small business and the slimness of large firms are the two basic facts of the Japanese economy. With these, one may argue that thus the extensive use of the advantage of division of labor is a source of Japan's industrial success. The critical issues here are: Who does coordinate the divided work of individual agents? How does she attain it? Are there any specific institutional arrangements which contribute it greatly? Why have these arrangements functioned well particularly, for instance, in Japan? Most readers realize that the Japanese economy is full of stylized facts, some of which are misunderstanding or stand on shaky grounds, and that there is a strong temptation to explain its success as owing to some of them, which often leads us to the "Japan-Is-Different-View." Each of those conventional view and models of the Japanese economy, such as the dual-structure-view, keiretsu-loan-model, Mainbank-model, and corporate-group-model, embodies own specific view of a coordinating agent and related institutional arrangements. But both on the theoretical and empirical grounds, they are totally false. The market may be an infallible answer. But it is almost always unsatisfactory. It is far from the truth that economists have highly developed theory either of the firm or the market, and thereby it is infeasible now to attack the above issues beyond this infallible answer rigorously with the established standard model. In Part IV, however, I try to explain some of the issues related to real world features of a firm, though they are still rudimentary. By this we can reach, I believe, an understanding of the organizational issues far better than those the conventional ones provide, which in return will contribute to the progress of the study of the firm and the market.

Part IV focuses on two specific aspects of firm organizations in Japan: corporate governance in Japanese firms in Chapter 11; and interfirm relationships in Chapter 12. To begin a study of intrafirm organization and interfirm relationships, we need a definition of a firm. Thereby the discussion of Chapter 11 begins with three questions related to it: where is the boundary of a firm? who decides the boundary and internal organization of a firm? how is the boundary related to the legal definition of a firm? Underlying these is the basic question of Coase [1937]: "why a firm emerges at all in a specialized exchange economy?"

My argument in Part IV is basically the nexus of contract theory associated with Jensen and Mechling [1976]. The central point for organizational issues, however, is who is "the controlling group" in Simon's word, that is, who has the power to set the terms of membership for all the participants. With the importance of employee's investment in organization specific human capital formation, the body of employees takes this key position, and selects as their representative the directors. Other stakeholders rationally exchange the agreement with it to be and stay friendly, like friendly shareholders and friendly banks. Since a firm in the real world is a legal fiction, the legal boundary of a firm usually does not coincide for this controlling group with the effective boundary for their decision making. A firm in the Coase's question and economic analysis in general is the set of activities and/or agents within the effective boundary, and therefore is different from a firm in the real world and thereby in statistics. Accordingly, many economic phenomena related to organization, for instance, the above mentioned two basic facts of the Japanese economy, must be explained differently. For the controlling group the legal boundary is only one of the constraints for their decision making, and may not be critically binding for designing organizations. Inside-outside distinction of a firm in Coase's sense depends on transaction costs, and the legal definition does not necessarily affect it heavily. In this view, even for an owner-manager it is for their interest to be friendly to the body of employees, and therefore the question of whether the management is separated from control is irrelevant.

Chapter 12 studies the other side of the discussion of Chapter 11, which suggests that the two basic facts of the Japanese economy do not necessarily imply the slimness of the effective boundary of organizations in Japan, therefore the Japanese economy is idiosyncratically decentralized. The central issues in this chapter are: How are the organizations and inter-organizational relationships formed and function? How are the economic activities within each coordinated? Who takes the leadership in designing the system for their coordination? Most parts is for case studies of interfirm relationships for three check points: (1) whether "transaction costs," 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 because of these relationships? 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 as 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. Four 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 rational choice of related parties. Section 12-9 discusses one most striking peculiarity of Japan's industrial organization, namely, the predominance of stable, long-term interfirm relationships with a non-exclusive characteristic.

I study firms in Japan in Part IV, like the preceding three Parts, and never I argue that they are different in any sense from those in other countries. The basic logic underlying the discussion in Part IV, that the factor which determines the form, character, and workings of organizations is organization specific human capital embodied by the body of employees, is technological and thereby not peculiar to any countries like Japan and the U.S. When some crucial difference is observed between economies, it must be caused by some environmental factors, including the legal system, history, and culture. As I mention in Section 11-9, we observe both the same type of observations and arguments on firms outside Japan and the literature with closely related arguments on the nature of organizations.

1-8. A Prior Rejoinder

Like my previous book in Japanese (Miwa [1990]), this volume will arouse strong reactions from various sides, some of which will use expressions, such as iconoclastic, controversial, and eccentric. Mostly they are because of the tradition mentioned in the first section of this chapter: it is only recently that many economists began to talk about the Japanese economy with the standard economics principles. This is a volume by an economist written primarily for two groups: for the scholars and students in economics and for comparativists interested in Japan. Prior rejoinder to some reactions will be helpful for better understanding of this volume and for avoiding confusions.

Some may complain that this volume does not talk about the secret of Japan's industrial success, and ask the explanation of this choice. First, neither Japanese nor American firms (or firms in other countries) are particularly badly managed. The reason is straightforward: most badly managed firms either fire their managers and improve their performance, or go out of business. "Elementary notions of comparative advantages suggest that some firms in any country will always be uncompetitive compared to firms in the same industry elsewhere" (Ramseyer [1993, p. 2020]. Thereby I take 4 out of 5 case studies in Chapter 12 from not so successful industries and conclude that we observe almost the same characteristics in interfirm relationships in these industries as those in the successful automobile industry. Second, I am part of the majority of economists, identified as the "non-miracle-occurred" school by Chalmers Johnson [1982. p.9], which school "do not literally assert that nothing happened to Japan's economy, but they imply that what did happen was not miraculous but a normal outgrowth of market forces." The following statement of Hugh Patrick quoted in Johnson [1982, p.8] represents this view:

> I am of the school which interprets Japanese economic performance as due primarily to the actions and efforts of private individuals and enterprises responding to the opportunities provided in quite free markets for commodities and labor. While the government has been supportive and indeed has done much to create the environment for growth, its role has often been exaggerated. (Patrick [1977, p. 239].)

This has led many, typically political scientists such as Johnson and David Friedman, author of Friedman [1988], ask who then led, or who made, such a miracle. These scholars will not accept the "invisible hands" view suggested by economists as a persuasive answer. Readers who subscribe to this view are asked to consider a similar question put forward in the 1920s by non-Americans, such as Europeans or Japanese: who led, or what made, the miracle of the rapid growth of the American economy since the nineteenth century? My answer, like that of many economists, would be "invisible hands." Third, simply I have no clearer answer than the majority of economists, and I should say that I wish I could. Like mosts economists (and probably like most scientists), I will not claim to explain all aspects of Japanese economic phenomena.

In reading this volume (and the literature and talks about the Japanese economy), keep in mind that in Japan the Japanese usually speak, write, and document in Japanese, only a small portion of which is translated into English. In addition, because of the above mentioned tradition, almost all the literature and materials in Japanese are still based on the view that Japan is a world of exchange by coercion rather than by agreement. Recent writings in English even by economists who read Japanese often follow the same line, by adopting the conventional view without a careful examination. Some simply reproduce the conventional views and models of Japanese economic phenomena, and others reinterpret them through the standard economics principles, only resulting in a cosmetic change, like keiretsu-loan to Mainbank relationship. As shown in Chapter 6, in this case, phenomena to be explained have never existed and the assumption underlying the argument was invalid. Thus, they are like attacks with high-tech weapons on a sand castle or a mirage.

To readers who reply that where there's smoke, there's fire, I would like to mention a Japanese proverb originally from China: "One dog barks at a shadow, and hundred dogs at the voice" (an approximate equivalent in English may be "Much ado about nothing.") and ask to recall what the wrong dual-structure-view was and what the fire was. My job on the corporate-group-model in Chapter 7 is analogous to examining the validity of the existence of UFOs (unidentified flying object). Others may respond as did Wallich and Wallich[1976, p.253]: "[I]t is tempting . . . to show that economics works in Japan as it does elsewhere.... [But a] triumphant finding that the laws of economics do apply to Japan and that, economically speaking, Japan after all is not very different may be misleading." But what else can explain economic behavior? Some search for differences in Japan, on the assumption that "it is obvious that the system differs greatly from Western systems in both its structure and its behavior" (Ibid.) This is what so many supporters of the incorrect conventional view have done. Readers may comment, "why so many talks and new literature on Japan's Mainbanks and industrial policy?" My answer is threefold. First, many ignore the <u>post hoc, ergo propter hoc</u> fallacy. Second, strong demand for the talks and literature exists among politicians, government officials, journalists, and academics, particularly in the former socialist economies. It creates the supply, which the politicians and government officials in Japan support enthusiastically both on the belief of the effectiveness and for their self justification. Third, as is usual the case, the authors of the literature on Mainbanks, for example, are only those who are interested in them. Once lost an interest on it, she will never be an author. Thus, now there exist the "Mainbank literature industry" and the "Japan's industrial policy literature" industry.

Some may list "important issues" and criticize this volume as it ignores them: it does not talk about the secret of Japan's industrial success; it does not fully investigate the labor market; it ignores important political factors; and it does not even investigate the basic question of why Japanese firms decided to subcontract rather than produce in-house. In commenting <u>The New Industrial State</u> of Professor Galbraith, Solow [1967, pp.100-101] used the distinction of big-thinkers and little-thinkers. Big thinkers made important decisions, such as what to do about Jerusalem, and how to deal with crime in the streets, and little thinkers made unimportant decisions, such as what job he should take, where they should live, and how to bring up children. Economists are determined little-thinkers, and this is not a book for the dinner table but for the desk.

1-9. Conclusion

[Macintxx.miwa]

Is the Japanese economy different from other economies? Are Japanese firms and industrial organization different from those in other economies? Will studies of Japanese firms and industrial organizations provide something instructive for restructuring organizations and economic development? The answers are, of course, both yes and no.

As Coase [1988, p. 5] noted, the firm in economic theory has been a shadowy figure. Many argue, like Tirole and Holmstrom [1989, p.63]:

> [F]irms have, as ever-developing institutions, played a central role in the growth and prosperity of a country's economy. In tandem with technological innovations, innovations in firm organization have enhanced welfare greatly. It would seem essential to understand the underlying forces behind such institutional dynamics, both for a proper appreciation of how institutions have conditioned economic development and for policy decisions that relate to institutional change.

It is my purpose to demonstrate that the standard economics principles explain the dominant patterns of Japanese economic phenomena. The principles are not those anyone invented to explain Japan. Indeed, they were not invented to explain any particular society. Nowhere in this volume I argue that Japan is different from others, in this sense. My argument needs no jargons, including <u>keiretsu</u>, corporate groups, Mainbanks, and industrial policy, invented for and frequently used in talks about the Japanese economy, except when I introduce and critically review the conventional view. Japanese firms and industrial organization deserve wide attention, not because of its <u>international competitiveness</u> which is a dumb idea (on this point, see Krugman [1994]), but because of the huge size of the economy and its history of development. Most Japanese firms are well-run; most American firms are well-run. Most badly managed firms either fire their managers and improve their performance, or go out of business. Since the time of Marco Polo of <u>Il milione</u> in the 13th century, whose description of Cipango or Zipangu set a definite goal for Columbus in his journey, Japan has been a rich source of imagination and myth, particularly for the Westerners, and after all it still remains full of misunderstanding and mythfication. I hope this volume will work as a push to a proper understanding of the Japanese economy.

I wish to deal only with Japan, and only with the basic contours of behavior of firms and function of the market. That I consider challenge enough. But, this is not an area study. Every country has its peculiarity; so does every firm or each group of firms. Hence, each can survive in a market economy. It is my hope that others provide comparable volumes for other economies, which enable us to carry out comparative studies of firms and industrial organization. This is, of course, not for international competitiveness, but both for deeper understanding of organizations and the market in action and for the development of the theory of the firm and the market. The Japanese economy is unique enough for a close investigation; so are other economies.

Table 1-1 GDP at Current Prices in Group 7 Countries (US $ billion)

	Japan	US	UK	Germany	France	Italy	Canada
1990	2,932	5,522	983	1,496	1,195	1,095	572
1980	1,036	2,626	524	821	656	396	253
1970	197	974	120	187	149	94	84
1960	43	504	72	73	62	35	38

Source: Comparative Economic and Financial Statistics, annual, Bank of Japan.

Table 1-2 Per Capita GDP in Group 7 Countries (US $ 100)

	Japan	US	UK	Germany	France	Italy	Canada
1990	237	221	171	237	211	190	215
1980	89	115	94	133	122	70	106
1970	19	47	22	31	29	17	39
1960	5	28	14	14	14	7	21

Source: Comparative Economic and Financial Statistics, annual, Bank of Japan.

Table 1-3 Real GNP Growth Rate in Japan: 1945-80
(five year average; in percent)

	1945-50	1950-55	1955-60	1960-65	1965-70	1970-75	1975-80
Growth rate	9.4	10.9	8.7	9.7	12.2	5.1	5.6

Source: Adopted from Kosai [1981, p. 2], Table 1.

Table 1-4 Export Component Ratios of Japan: 1900-1990 (in percent)

	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990
Marine products	1.8	1.6	0.9	2.6	2.9	3.6	3.2	1.6	0.5	0.3
Tea	4.4	3.3	0.9	0.5	0.7	0.6	0.2	0.0	0.0	0.0
Coal	9.8	3.4	2.3	1.5	0.2	0.0	0.0	0.0	0.0	0.0
Copper	6.3	4.6	0.7	1.5	0.3	0.0	0.0	0.0	0.0	0.0
Cotton yarn	10.3	9.8	7.8	1.0	1.6	2.1	1.3	0.1	0.0	0.0
Cotton fabric	2.8	4.5	17.2	18.5	10.9	24.8	8.6	1.0	0.3	0.0
Silk yarn	21.8	28.4	19.6	28.4	12.2	4.7	2.2	0.0	0.0	0.0
Silk fabric	9.1	7.2	8.1	4.5	1.0	2.7	1.3	0.1	0.0	0.0
Non-cellulosic fibre fabric	-	-	-	2.4	3.6	6.0	5.3	3.5	1.4	0.7
Pottery	1.2	1.2	1.6	1.8	1.7	2.2	1.7	0.7	0.3	0.2
Cement	0.1	0.3	0.5	0.7	0.4	0.7	0.6	0.2	0.2	0.1
Machinery	0.0	0.9	2.6	1.4	13.0	10.5	25.3	46.3	46.4	75.0
(Ships)	0.1	0.1	0.8	0.4	1.0	3.2	7.1	7.3	2.7	1.9
Steel	-	-	0.7	0.6	-	8.7	9.6	14.7	8.8	4.4
Others	32.4	34.8	37.1	34.6	51.5	33.4	40.7	31.8	42.1	19.3

Source: Adopted from Nakamura[1993, p.43], Table 16.

Table 1-5 Production of Selected Goods, 1935-53

year/unit	Sewing machines	Electric fans	Radios	Ships (tons)	Three-wheel automobiles	binoculars	Bicycles	Cameras	Clocks and watches
1935	12, 301	43, 562	153, 974	174, 067	9, 837	81, 700	903, 000	95, 326	4183, 000
36	40, 924	42, 228	427, 287	274, 784	12, 557	79, 200	1055, 000	154, 648	4864, 000
37	53, 133	46, 918	406, 753	483, 548	15, 233	99, 500	1090, 000	178, 321	5114, 000
38	104, 204	43, 575	604, 463	464, 679	10, 450	45, 600	1080, 000	187, 569	3814, 000
39	132, 997	58, 302	740, 356	391, 679	7, 953	62, 500	950, 000	205, 522	3384, 000
40	154, 402	64, 780	852, 903	401, 866	8, 113	60, 000	1245, 000	218, 659	3424, 000
41	142, 317	55, 828	917, 001	466, 249	4, 503	56, 400	185, 000	203, 011	2935, 000
42	51, 129	41, 200	841, 301	547, 051	3, 721	35, 200	181, 000	133, 854	1582, 000
43	25, 573	45, 240	741, 816	1030, 601	2, 259	36, 100	70, 000	57, 588	808, 000
44	16, 047	2, 360	262, 372	2198, 790	1, 338	60, 000	65, 000	29, 548	413, 000
1945	2, 150	1, 240	87, 529	632, 005	686	14, 400	20, 000	13, 082	98, 000
46	36, 912	66, 282	672, 676	143, 860	3, 647	37, 836	-	24, 145	714, 000
47	133, 949	74, 329	772, 428	83, 565	7, 432	31, 158	-	51, 772	1599, 000
48	165, 726	72, 167	769, 730	162, 898	16, 852	47, 623	337, 000	53, 016	2404, 000
49	274, 468	95, 703	702, 327	163, 980	26, 727	97, 356	552, 000	83, 243	3051, 000
50	493, 038	118, 804	281, 602	229, 761	35, 503	115, 970	981, 000	117, 481	2331, 000
51	1030, 289	173, 903	399, 943	454, 149	43, 717	176, 180	987, 000	213, 840	3050, 000
52	1260, 293	290, 879	929, 126	627, 064	62, 262	179, 510	1019, 000	357, 918	3803, 000
53	1318, 059	434, 585	1391, 031	521, 759	98, 405	212, 704	1184, 000	663, 484	4673, 000

Source: Tsusho Sangyo-sho (Ministry of International Trade and Industry), Kokogyo Seisan Shisu (Production Indexes of Mining and Manufacturing Industries), 1955. Adopted from Miwa [1993, p. 137].

Table 1-6 Japanese Passenger Car Production and Exports

Year	Production	% Exported

Table 1-6 Japanese Passenger Car Production and Exports

Year	Production	% Exported
1945		
1946		
1947	110	0.0
1948	381	0.0
1949	1 070	0.0
1950	1 594	0.0
1951	3 611	0.0
1952	4 837	0.0
1953	8 789	0.0
1954	14 472	0.0
1955	20 268	0.0
1956	32 056	0.1
1957	47 121	0.9
1958	50 643	4.7
1959	78 598	6.2
1960	165 094	4.2
1961	249 508	4.6
1962	268 784	6.0
1963	407 830	7.7
1964	579 660	11.6
1965	696 176	14.5
1966	877 656	17.4
1967	1 375 755	16.2
1968	2 055 821	19.8
1969	2 611 499	21.5
1970	3 178 708	22.8
1971	3 717 858	34.9
1972	4 022 289	35.0
1973	4 470 550	32.5
1974	3 931 842	43.9
1975	4 567 854	40.0
1980	7 038 108	56.1
1985	7 646 816	57.9

Source: Nihon Jidosha Kogyokai (Japan Automobile Manufacturer's Association), Jidosha Tokei Nenpo, Jidosha Tokei Nenpyo. Adopted from Miwa [1990, p. 68], Table 4-1.

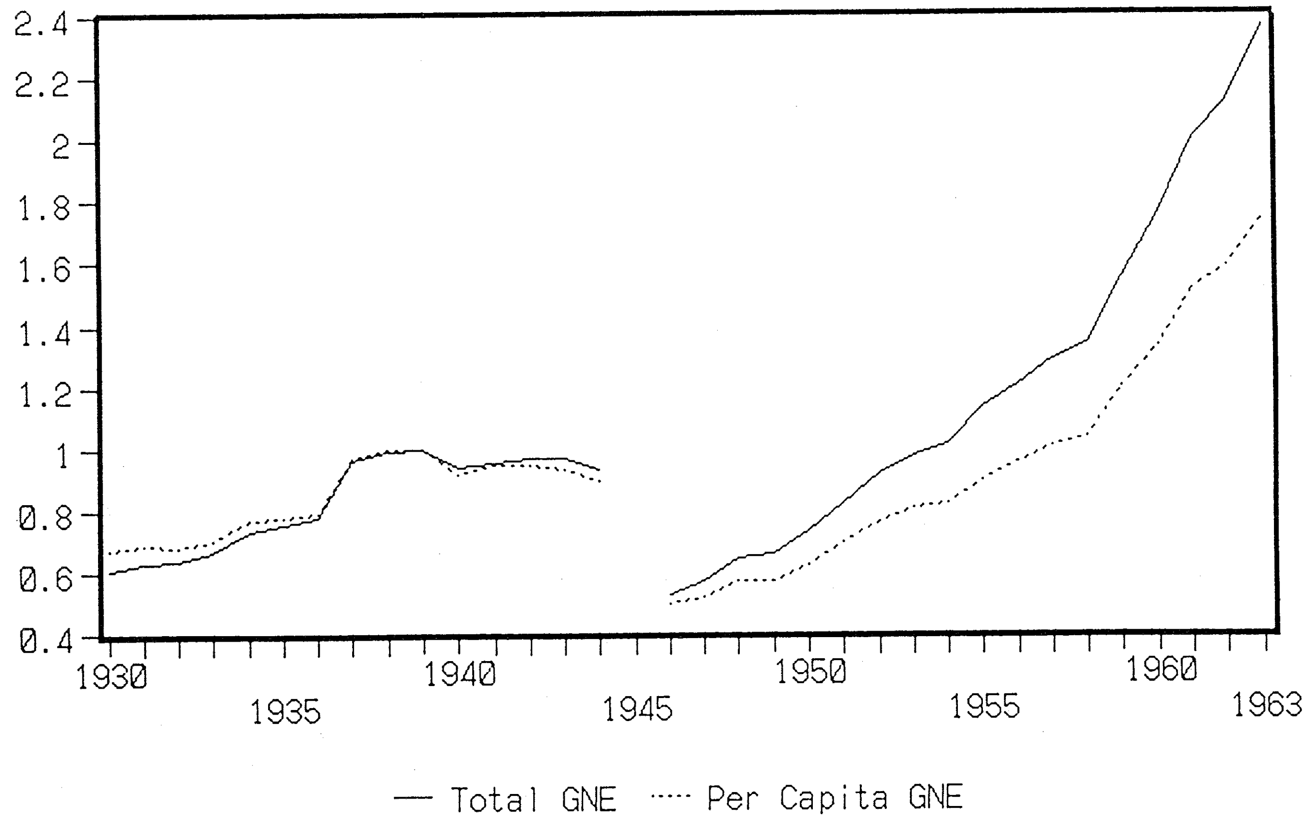
Table 1-7 A Comparison of Size of Large Firms: American, European, and Japanese

American		European	Japanese
General Motors		Volkswagen	Toyota
[N]	751	266	72
[S]	124705	50290	68375
General Electric		Philips	Hitachi
[N]	284	240	82
[S]	60236	33282	31337
Du Pont		ICI	Toray
[N]	133	128	10
[S]	38695	23321	4782
Dow Chemical		Bayer	Mitsubishi Chemical
[N]	62	162	10
[S]	18807	27941	5804

(*)Sales are converted at the nominal exchange rate of Dec. 31 1991.
[N]: Number of employees (in thousand) in 1991.
[S]: Sales (in US$ million) in 1991.

Source: Kaisha Shikiho, Toyo Keizai Shimpo-sha.

Fig 1-1. Total and Per Capita GNE
(at current prices in 1934-36;1939 = 1)



Source: Kokumin Shotoku Tokei Nenpo [National Income Statistics Yearbook], 1963 edition, Economic Planning Agency.