

# The Modern Corporation and The Enterprise System in Japan

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# The Modern Corporation and The Enterprise System in Japan

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#### INTRODUCTION

Japanese corporations are different. They created and sustained an organizational revolution in Japan while Western companies were more the culmination of a lengthy process of organizational evolution. As a result, Japanese firms are at odds with the history and a good deal of the theory of the firm as it has appeared in the West, and accordingly the distinctiveness of the modern corporation and the enterprise system in Japan are not often recognized. Instead Western history and theory are all too often presented and accepted as received wisdom.

The structure and system of Japanese corporations are different because the firm has developed distinctive characteristics in Japan: seen alone, Japanese enterprises are smaller than their Western counterparts, and, on the whole, they are more specialized in form and function; seen as parts of a wider association of related firms, Japanese companies are often formidable building blocks of macro-organizational diversity and integration. Such differences, whether considered alone or in combination, distinguish Japanese corporations from all other corporations in the world.

Japanese companies are different for the simple reason that the circumstances of industrial and corporate development have been different. Most importantly, in comparison to major Western firms, large companies in Japan have evolved in an environment of severely constrained internal and external resources. Capital, information, management ability, and technology were all in short supply.

In order to overcome such disadvantages, a large number of frankly expedient and experimental combinations of production factors and human resources within a variety of organizational structures were tried. The most successful of these were quickly copied. Indeed, the history of the modern corporation in Japan is the history of these learned responses, and it is the distinctive corporate patterns of adaptation, coping, and adjustment in Japan that need to be studied and understood. Such patterns reveal each country's corporate past as well as delimit the direction of future change.

We emphasize three fundamental features of corporate development in Japan. First, Japanese corporations appeared suddenly, within a period of twenty years. Also, because market conditions as well as the nature of managerial, financial, and technical development in Japan were so unlike those of the other leading market economies, the history and contemporary function of modern enterprise in Japan must necessarily be different. As a result, although Japanese enterprises were modeled on the Western corporation, they were actually quite different in form and function. Moreover, apparent similarities in structure masked quite different aims: Japanese firms have almost always had the stark strategy of simple survival at home and abroad in the face of unfavorable odds as their most pressing concern.

Second, the most significant differences appeared at the top and the bottom of the organization. At the top, enterprise owners or their surrogates rarely involved themselves in the day-to-day affairs of running a business. Instead, they mixed with other men of influence, in government, industry, and commerce, and they set a moral, hopefully charismatic, example for those managers who actually worked beneath them. Even those top managers who had the training or inclination to involve themselves directly in business were necessarily consumed in issues of longrun strategic, civic, and social significance. Those at the top of early industrial enterprises in Japan were more akin to investors than to managers. Major Japanese companies have been relatively weak in terms on the number of top managers functioning at the apex of the corporation and in the quality of their business leadership.

Those doing the work, at the bottom, were close to the production line, workyard, and branch office. Because the corporation came so suddenly, those with technical and managerial knowhow were not insulated from the workplace. Neither foremen nor college graduates blocked the way. Those that knew how, thought they knew how, or could learn how from Western books and experts were put on the front line of production, trading, and decision making, whether or not they were experienced.

This has meant most significantly that foremen and managers in factories and

offices engaged in modern manufacturing and marketing, were not of such different classes, with different educational backgrounds, and with different loyalties and career paths within the corporation. Traditional customs and values of the premodern workplace were not transposed into the modern factory and they did not dull the cutting edge of the industrial revolution in Japan.

As a result of these fundamental differences which derive in large part from the speed of corporate development, the Japanese firm appeared as unusually attuned to extra- and supra-organizational issues at the top and rather well provisioned with managers and technical staff at the bottom. Many of the most striking differences between Japanese and Western enterprises, which we discuss later on, emerge from these considerations.

Nevertheless, in spite of these patterned differences, Japanese corporations are neither so alien as to defy description nor so unique as to prevent comparison and contrast. The Japanese corporation is, to use Alfred D.Chandler's phrase, a "subspecies" of the modern business enterprise which he defines in *The Visible Hand* as containing a number of distinct operating units and being managed by a hierarchy of full-time salaried managers. But the organization of those operating units and the nature of the managerial hierarchy in Japan appear to be rather different. Japanese corporations have developed their singular characteristics as a result of their history or, put more precisely, as a product of an evolutionary yet hothouse process of mobilizing scarce resources, such as capital and managerial knowhow, to stringent market and technological conditions.

#### Stages of development

Because of organizational and historical circumstances, the largest Japanese corporations as compared with the largest Western corporations, are smaller in size, more specialized in function, and more focused in product line. In addition, Japanese corporations concentrate managerial as well as other resources at the plant and factory level, so that they are bottom-heavy compared to the more top-heavy Western firm. Part of the reason for this smaller size but greater specialization of Japanese firms has to do with a shorter period of development. Japanese companies have been the last major companies to appear in large numbers in many industries.

But part of the reason for smaller size is strategic and was consciously chosen as well. Greater compactness in size and function, we believe, gives Japanese companies more flexibility and responsiveness to changes in the market and technology. Where size is an important consideration, however, Japanese companies will integrate, vertically and horizontally, to achieve economies of scale and scope, or group together for specific purposes to achieve advantages of size.

The grouping of companies itself has undergone considerable change during the last century. Depending upon which dimension is highlighted—financial, managerial, technical, marketing—it is possible to talk of an oscillation between loosely-coupled to tightly-coupled groupings or networks of companies. In view of

the heightened postwar world competition in markets and technology, however, the general trend is toward ever more tightly-coupled groups where managerial coordination is the rule.

Succinctly stated, we argue that most of the major older companies in Japan, that is those with seven or eight decades of history, have moved briskly through three modalities (stages/phases) during the past century: from 1890 to 1920, the modern company appeared: from 1920 to 1940, the large modern company debuted, and then reappeared from 1950 to 1965: while from 1965 to 1985, the expanded large modern company evolved.

Moreover, we are quick to point out that the characteristics of modern enterprises in Japan must always be considered within the context of interfirm collaboration, so that as a single firm grows, it must be often understood within the evolution of a constellation of related enterprises with which it is closely associated. Interfirm networks, like individual corporations, have evolved through several stages. From 1900 to 1920, *zaibatsu*-family, namesake interfirm groups appeared; from 1920 to 1965, loosely-linked, predominately financial groups (these were focused on *zaibatsu* holding companies before the war and on bank-centered groups after the war) emerged; and, from 1965 to the present, tightly-linked interfirm groups characterized by managerial coordination have developed. We call this last type of interfirm structure task-force groups.

The distinctive characteristics of each of these types will be discussed in detail below but in all cases it is useful to keep in mind that our argument is both organizational and historical, namely corporations may be organized in a variety of ways to achieve roughly comparable ends and that the routines and devices which are adopted to achieve those ends may be copied, imitated, and learned by others. Once organizations begin to move in certain directions, however, it becomes difficult to alter or reverse course, both because investments in fixed plant and equipment are not easily changed and because people learn how to behave in certain ways which cannot be simply unlearned.

#### The Japanese enterprise system

The modern industrial corporation and interfirm groups in Japan must be considered within the context of the Japanese enterprise system, that is single corporations and interfirm networks in Japan must be analyzed along with two other institutions: trade associations and industrial combinations, as well as the government. Although the evolution and attributes of the modern industrial firm in Japan can be

Table 1. Stages of Development of Japanese Enterprises

	ENTERPRISE TYPE	INTERFIRM TYPE			
1890-1920	modern industrial enterprise	zaibatsu-family, namesake group			
1920-1965	large modern industrial enterprise	financial group			
1965-1985	expanded large modern industrial enterprise	task-force, managerial group			

studied independently of these other institutions and notwithstanding that much may be learned from such an effort, it would be difficult to understand in detail not only the growth of the large corporation in Japan but also its current structure and behavior with such a foreshortened approach.<sup>1)</sup>

Obviously, the corporation in any capitalist economy must be understood similarly within the context of other institutions. But the unusually fibrous, elastic, and interwoven character of the ties which bind these institutions together in Japan and the historical circumstances which have forged this synthesis require that these institutions be considered all of a piece and mutually reinforcing if the success of Japan's business economy is to be satisfactorily explained. Together these institutions form, for lack of better words, a web or a network which underpins and girds the whole of economic activity in Japan. Without the matrix of these institutional ligaments, the modern corporation in Japan would have a very different history, structure, and behavior. Indeed, it is partly the balance between cooperation and competition in the elements which comprise the Japanese enterprise system that distinguishes the Japanese political economy from all others.

Finally, it is not simply a question of micro-economic or macro-economic differences but one of the interaction between them. Micro-economically, we intend to distinguish four outstanding features which characterize modern industrial enterprise in Japan: economies of scale, economies of scope, transaction cost economies, and economies of what we call value engineering.

ECONOMIES OF SCALE: increasing production beyond the cost break-even point, so that as the volume of production climbs, the cost per unit of production falls;

ECONOMIES OF SCOPE: increasing the number of related lines of goods and services through the same set of facilities (joint production and distribution), so that the cost per transaction is lowered;

TRANSACTION COST ECONOMIES: the costs of running the organization minus the production costs, or in general the costs of creating and maintaining a managerial hierarchy;

ECONOMIES OF VALUE ENGINEERING: costs of production will fall as it is learned how to manufacture more quickly, less expensively, and more efficiently; improvements in product design, manufacturing process, parts delivery, and work organization result in cost savings.

Macro-economically, we emphasize two concepts: industrial group capitalism which results in managerial coordination as much through effective communication as through vertical integration among many enterprise units; cooperation within trade and industry associations and between business and government. Thus, we assert that the balance between cooperation and competition among both private and public institutions in Japan seems to be a special case, when contrasted with the

<sup>1)</sup> Of course, there are always exception. The exceptions in this case are found mainly in the area of consumer goods, like foods and beverage, lingerie, cameras, wristwatches, electric consumer goods, where a number of successful entrepreneurial firms without strong government or industry ties can be found in Japan.

# Western experience.

These various perspectives on the modern Japanese corporation and enterprise groups in Japan can be illustrated by the following  $2 \times 2$  paradigm which captures the different fields of activities undertaken by the elements of the Japanese enterprise system:

	Macroanalysis	Microanalysis
Modern Corporation	<ul> <li>government and firm interaction</li> <li>taxation &amp; investment policies</li> <li>capital markets</li> </ul>	<ul> <li>economies of scale</li> <li>economies of value</li> <li>engineering</li> <li>managerial hierarchy</li> <li>management structure</li> </ul>
Enterprise Groups	<ul> <li>government and group interaction</li> <li>policies toward cartelization.</li> <li>industry structure, &amp; regulation</li> <li>domestic &amp; international competitiveness</li> </ul>	<ul> <li>economies of scope</li> <li>economies of value engineering</li> <li>transaction cost economies</li> <li>information and decision networks</li> </ul>

# Coordination and cooperation

The core of competition as seen from within the context competiting organization is managerial coordination. Coordination in the sense which I am using the word refers to the planning of the flows and functions associated with the actual processes of production. An essence of coordination is how to run production full and steady with very little inventory. Japanese enterprises excel at this, for reasons which will be explored later in detail. Cooperation, by contrast, focuses on the legal, financial, and managerial environment within which coordination occurs. Coordination and cooperation are interdependent obviously, but it is useful to distinguish the coordination of production functions from other factors in modern industrial enterprise.

Coordination defines much of the interaction that takes place within the corporation; between the corporation and its immediate suppliers and buyers; and, between the corporation and its closely related affiliates within an enterprise network. Cooperation characterizes the ties between a corporation and less closely related affiliates, intrafirm relations which occur within trade associations, and government-business interactions.

In Japan from the late nineteenth century until the eve of World War Second, coordination has been of two rather different sorts. The prewar enterprise groups which were known as zaibatsu were primarily concerned with maximizing the economies of scope, that is joint production and distribution. The so-called new zaibatsu (which is a misnomer as these enterprise groups were considerably different than the nineteenth century zaibatsu) and the smaller, non-zaibatsu affiliated enterprises in such industries as textiles, foods, paper, and clay/stone/glass, depended

less on the economies of scope than on those of scale, even though these companies, as we will see, were not so highly centralized and vertically integrated in their organization and operation.

Since the war, these two rather different sorts of groups, have continued although the distinctions between them have weakened. The traditional zaibatsu groups or their postwar approximations have continued with banking and financial services as their core functions, whereas the other groups are product- or manufacturing-focused aggregations of firms. The one we call financial groups, the other task-force groups.

The reasons for the two sorts of groups and thus the two types of coordination are historical. Zaibatsu evolved for the greater part as non-manufacturing enterprise groups with banking, trading, shipping, commerce, real estate, and insurance as their core businesses. All of these endeavors emphasize economies of scope, that is increasing the volume of related services through the same set of facilities so that the cost per transaction is lowered. With the exception of copper smelting and some aspects of shipbuilding, zaibatsu groups did not enter those industries where economies of scale were paramount until after World War First, and even then it is doubtful if they really competed on the basis of scale. Zaibatsu firms were allowed to join the worldwide oligopoly in such industries as petroleum, electrolyte chemicals, steel, and electrical equipment, on the basis of technological tie-ins with major American, German, and English manufacturers and on the condition that their markets were confined to Asia.

Because of this latter condition, it is moot whether or not the size of the market in Japan and Asia was large enough to support factories which could operate at a minimum efficient scale, that is the size necessary to achieve economies of scale. Thus without the transfer of technology from the West which permitted potential scale economies to be realized by Japanese firms, it would seem that neither sufficient demand nor current technology would have supported scale economies in many prewar zaibatsu industries.

Non-zaibatsu firms in the textile, food and beverage, paper, and clay/stone/glass industries did compete on the basis of scale either in the international market in the case of textiles or in the domestic market for the other manufacturing lines. Coodination in this case was not designed to drive related activities through the same set of facilities but to make more of the same product faster, cheaper, and better. This placed a high premium on site- and physical asset-specificity and a somewhat lower emphasis on human-asset specificity whereas the economies of scope which characterized zaibatsu groups at the time tended to stress human-asset investment over other sorts of asset-specificity. This may have been simply the result that bank, real estate, and trading offices cost a good deal less to set up and operate than cement plants and textile factories.

Just as the nature of coordination differed depending on the type of industry and the character of the interfirm ties in that industry, so too did cooperation vary by industry in terms of trade association activities, government-business relations, and the general business climate. Accordingly, the intensity, density, and duration of the interactions between the elements of the Japanese enterprise system must be defined by period, by sector of the economy, and even according to the entrepreneurial posture of individual firms.

Finally, it needs to be said, that coordination and cooperation were and are not seen as incompatible with competition in Japan. In the first place, because scale economies were not emphasized and because barriers to entry were consequently low, competition in manufacturing in most areas has been fierce in Japan. But, because of the conspicuous involvement of the state in economic and industrial planning and because of the mutual benefits of exchange which were realized through interfirm and intergroup cooperation, cooperation has long been highly regarded and frequently preferred as a form of economic activity in Japan. Not only have various forms of economic coordination and cooperation co-existed for a long time but also their overwhelming purpose was to aid rather than to constrict economic activities.

Anti-Japanese terms such as "Japan Incorporated" entirely misconstrue the nature of this coordination and cooperation. The truth is not that the aims, goals, and methods of business and government in Japan, to take the most frequently cited example of "Japan Inc.," are identical, or even that they overlap for the most part, but that business and government agree instead that coordination and cooperation serve each of their separate purposes better than do competition and organizational conflict.

The important point is that in good times as well as bad, cooperation and competition are seen as mutually compatible and achievable, and the task is to balance rather than to counter-balance them. This emphasis gives Japanese business and entirely different flavor than that found in the advanced industrial economies of the West. Coordination, cooperation, and competition are reciprocal and reinforcing modes of beneficial interaction.

## 1. ORIGINS, EVOLUTION, AND ATTRIBUTES

#### **Origins**

Tree of the four institutional elements comprising the Japanese enterprise system may be said to antedate the Meiji Restoration of 1868, when the Tokugawa Shogunate, a federation of allied baronies and domains, was overthrown and a much more powerful and centralized government was formed. Just as the Meiji government was more effective, complex, and commanding than its predecessor, so too the institutional elements of the Japanese enterprise system which continued from the Tokugawa period (1600–1867) underwent significant change, adaptation, and expansion. Nevertheless, the origins of these institutions must be found before the Meiji Restoration.

At the enterprise level, there was nothing akin to modern industrial corporation during the Tokugawa period but the concept and, more importantly, the practice of business in an institutional sense was well understood and developed. The household or something analogous to the household was the basic unit of business, and such modern practices as perpetual succession, decentralized organization, and functional specialization were accommodated within the concept of a household which was engaged in one or several lines of business.

It is often argued that this concept of the household as the core of business at the enterprise level continues today, and to a great extent this is true ideologically. Japanese companies actively promote paternalistic policies of employment and they attempt to engender in their employees an emotional as well as economic identification with the firm. This is enveloped by an all-embracing philosophy of company membership and exclusivity. That these efforts strike a responsive chord with so many Japanese may be taken as evidence of the attractiveness and pervasiveness of the household analogy in Japanese business organization, and this is in many ways a legacy of traditional household form of business organization.

The omnipresence and omnipotence of government in business was well understood and accepted from the beginning of the Tokugawa period. But the ability of government to exert its power over merchants and the marketplace was sporadic and uneven, and, as a result, the government's mastery of business was theoretical more than actual. Nevertheless, the *de facto* independence of business was deceiving for the government claimed and, more importantly, was accorded *de jure* control of the market by all those who bought and sold there.

In contrast to Japan, the French government's involvement in business was real, relatively effective, and largely centralized from the eighteenth century. In the Japanese case, however, because control was de jure rather than de facto, the periodic or geographical ineffectiveness of government control did not disestablish the recognition and acceptance of government authority in the marketplace. Lip service to state involvement in the economy created an important and widespread precedent for later government regulation.

The government's claims were most often transmitted and enforced through guild and trade associations. These have a long history, even predating the founding of the Tokugawa Shogunate. The *miyaza* and *kabu-nakama* associations (religious guilds and commercial monopolies) of local and regional origin, for example, which were founded before the seventeenth century, were forced to align themselves with the unquestionable authority of the Tokugawa government after that time. New associations were likewise legitimated by central government imprimatur. Indeed, the government encouraged such associations for they served dual purpose of providing revenue in the form of licensing fees and commodity-specific taxes and of regulating markets in the absence of the government's ability to do so directly.

The country was prosperous by Asian standards, well organized politically and economically, and socially stable. By the end of the Tokugawa period, it is estimated that many peasants derived as much as fifty percent of their income from non-agricultural pursuits, that one-quarter of the population lived in towns and

cities, and that forty percent of all Japanese were literate.

Well developed local, regional, and even national distribution channels existed for all variety of agricultural and non-agricultural products. This sales and distribution system at both the wholesale and retail level, in spite of periodic vacillations in government support for the system, would become a major asset in Japan's efforts to industrialize after the collapse of the Tokugawa regime. Often modern manufacturing firms could depend on the distribution channels and customer/product service that was carried over from the Tokugawa period without having to reproduce those capabilities within their own organization.

Although it would be mistaken to equate on a one-to-one basis these preindustrial institutions—the household enterprise, government's de jure control of business, and trade associations—with three of the four institutions comprising the modern Japanese enterprise system, it would be wrong to overlook and discount them as well. The Meiji Restoration which overturned the Tokugawa government was a largely bloodless change, and at the risk of oversimplification one group of warriors could be said to have simply replaced another. The Restoration itself was more of a palace revolution than a violent social and economic upheaval, and as a result, many of the institutions and customs of the past continued and became, as a result, the antecedents of the elements comprising the Japanese enterprise system.

#### **Evolution**

The modern enterprise system begins to emerge clearly during the decade following the Meiji Restoration as the national government changed from an institution primarily concerned with regulation to one obsessed with development. Once internal political rivalries and external diplomatic relations were put in order, the Meiji leaders embarked during the 1870s on an ambitious and far-reacting reform of the business economy.

Traditional licensing and market regulating agreements with trade associations and middlemen were scrapped, favored urban merchants took on new lines of government commissioned business, and model factories and industrial endeavors were either initiated by or subsidized by the government. The later industrial take-off of Japan, relative to the countries of Western Europe and North America, resulted both in a frenzied paranoia over Japan's relative economic backwardness and a certain degree of strategic advantage as Japan's leaders attempted to pick and choose from among the already established manufacturing technologies and products of the West.

Needless to say many, if not most, of the new ventures founded in the late nineteenth century failed, whether for a lack of capital, knowhow, experience, or all three. This was true for public as well as for private concerns which were far greater in number if generally more limited in size than government-backed ventures. The difference was that government-initiated concerns were guaged as much by what they contributed to the public well-being as by the amount of money they made (or lost). The desire, indeed the imperative, to create a "rich and strong country" (fukoku-kyōhei) was overriding if Japan was to survive independent of Western colonial or semi-colonial control. But even so, government-backed enterprises could not lose money indefinitely, and in the 1880s many of the government-founded businesses of the 1870s were sold off at nominal prices to the private sector.

It is important for our purposes to distinguish between the beginnings of industrialization and the appearance of a modern management philosophy and practice in Japan. The emergence and even the maturation of industrialization in Japan was not synonymous with managerial capitalism. While the factory system was firmly rooted by the late nineteenth century, a modern managerial system characterized by complex, multi-unit organization, sophisticated accounting and production controls, and foremost by a well-developed managerial hierarchy did not appear until the time of World War First or thereafter.

Critical distinctions must be raised, therefore, between the emergence of the factory system, the establishment of modern industrial corporations, and the full-blown appearance of what is called herein the modern, large corporation. Chronologically, the factory system is in place by the late nineteenth century, modern corporations debut from the turn of the century until the 1920s and 1930s, while the modern, large corporation begins to appear during the interwar and early postwar years. In all cases, these distinctions relate to the size, complexity, and sophistication of the managerial hierarchies that governed production and distribution activities.

Throughout the early years of the Meiji period, the government at both the national and prefectural level encouraged new trade and industrial associations, generally known as  $d\bar{o}gy\bar{o}$  kumiai, to help clear the way for the introduction and dissemination of Western technology, factory management techniques, commercial law, and practical training and education. Again, though the government's use and encouragement of such groups was similar to the regulatory role of business played by the Tokugawa authorities, the Meiji junta was much more active and constructive in its efforts to stimulate "modern" business methods and thinking. By the mid-1870s, it had fostered a climate which was on the whole conducive to investment, innovation, and risk-taking even though its policies were not always consistent, fair, or effective.

Nevertheless the government's pioneering efforts to foster business development and its support for trade and industry associations in particular were not radical acts in themselves because of the well established precedents for both sorts of activities during the Tokugawa era. The differences were to be found in the patriotic and nationalistic motivations of the Meiji leaders and businessmen, the more rigorous business climate as a result of foreign competition, the quickened pace of market and technological opportunities.

# The emergence of enterprise groups

The government's decision to sell many of the industrial projects which it had undertaken during the 1870s to private investors both occasioned and coincided

with the emergence of one of the four institutional elements comprising the Japanese enterprise system, namely groups of affiliated business enterprises. This is often referred to as the rise of the zaibatsu which may be loosely defined as a network of related enterprises under family ownership. For descriptive as well as analytical purposes, we define these early groups primarily by their common ownership ties, and call them namesake groups. Although some of the better known zaibatsu groups such as Sumitomo and Mitsui, trace their origins to a time before the early Meiji period, their history as combinations of interrelated but distinct businesses date from the last quarter of the nineteenth century.

With the appearance of the zaibatsu, all four institutional elements which combine to form the Japanese enterprise system are present, even though another generation will pass before these elements become closely enough interwoven to merit the appellation of the Japanese enterprise system. The reasons for this were understandable.

The lack of integration among zaibatsu-related ventures in the late nineteenth century was largely a result of the helter-skelter of government-business cooperation. Neither government's nor private businesses' early investments were well coordinated, and the divestiture of government projects was likewise pell-mell. Political intrigue, regional factionalism, bribery, and favoritism appear to have infected the decisions of who got what for how much. Nevertheless, government and zaibatsu business leaders shared a vision of a strong and prosperous Japan, and this vision diminished the irregularities of the process of devolution.

The purchasers, for their part, had not always thought out how the government-initiated enterprises would fit into the patterns of business which they had established already. Older *zaibatsu*, like Sumitomo and Mitsui, were mainly single-function, single-product concerns. Sumitomo specialized in copper mining and smelting while Mitsui dealt in money exchange and in the wholesaling and retailing of cloth. When Sumitomo and Mitsui took on new lines of manufacturing and mining endeavor as a result of government divestiture, there was often a lack of fit between the new ventures and their previous business activities.

Nevertheless, in Sumitomo's case because it purchased only those government enterprises, related to mining and metals production and because it did not venture beyond these activities, there was a relatively high level of correlation among its business activities in the late nineteenth century. However, Sumitomo ran these interrelated businesses more as shops than as separate divisions which is to say that the authority of the Sumitomo holding company in running these separate activities was paramount. As a result, mining activities, iron manufacture, copper smelting, and electric wire fabrication—the main lines of Sumitomo business—did not each have sizeable numbers of managers to plan and execute their separate activities. Indeed, there was only one set of sales offices for all of these different products areas.

In Mitsui's case, government divestiture did lure it into activities outside of its traditional emphases in money exchange and cloth merchandising. From 1903 to 1907 Mitsui's head office ventured into three different manufacturing lines, purchas-

ing or establishing three silk reeling factories, four cotton spinning mills, and one electrical machinery plant (Shibaura Electric Works). Most of these initial manufacturing efforts failed, and for the most part they failed for a lack of effective management. Mitsui ran them again more as shops than as divisions which is to say that they did not keep independent, capital-based accounting records, they did not have more than a handful of managers assigned to oversee their operations, and those that were so detailed were neither delegated much authority nor given sufficient staff support.

As one after another reeling or spinning factory failed, Mitsui gradually loosened head office control over its manufacturing operations and allowed them to become more like independent divisions. This meant giving them greater managerial autonomy as well as larger staffs of line and functional specialists. As a result, Kanebo Spinning Company, Oji Paper Company, and Shibaura Electric Works, all become major companies in their respective areas between 1910 and 1920, but they did so by separating their operations from, rather than integrating them with, the Mitsui Omoto-kata or head office.

The newer zaibatsu, Mitsubishi and Yasuda, were likewise highly concentrated in certain fields of business before they expanded as a result of the sale of government enterprises; Mitsubishi was organized around shipping activities and Yasuda was focused in banking and financing.

In Mitsubishi's case, however, Yataro Iwasaki, the founder of the group, labored to knit together his diverse business activities and he hired hundreds of university graduates from the turn of the twentieth century to staff and direct his growing business empire. In addition to maritime shipping, by the Russo-Japanese War of 1904-05, Mitsubishi was heavily involved in shipbuilding, coal mining, iron ore and steel manufacture. These related but nevertheless distinct lines of business were given a fair amount of independence and support from the Mitsubishi holding company, and by 1917-18 they were made independent companies although they were still very much under the strategic control of the Iwasaki family. In addition, other companies unrelated to the Mitsubishi interests in shipping, mining, and metals, such as Asahi Glass, Nihon Kogaku, Kirin Beer, and Mitsubishi Paper, were added to the Mitsubishi group by World War First.

In short, the zaibatsu—whether new or old—did not evolve in a coordinated and logical fashion. Manufacturing and mining ventures which were purchased from the government were added to the zaibatsu's existing non-manufacturing pursuits in banking, shipping, insurance, warehousing, and merchandising.

Nevertheless, as this brief outline of zaibatsu origins has indicated, business-government cooperation has been important to modern industries in Japan from their inception. Since zaibatsu groups began in mining, shipping, and banking for the most part, and it is these businesses which color the subsequent evolution of zaibatsu structure. Coordination among numerous zaibatsu businesses was achieved gradually during the early twentieth century as scores of well educated managers and engineers were brought into zaibatsu companies, both operational companies

and the holding companies which zaibatsu families had established to secure control over their growing business empires.

As a result, until the turn of this century, zaibatsu were slow to develop a strategy of organizational centralization and integration based on the concepts of the economies of scale, especially, and the economies of scope, to a lesser extent. Such economies could be realized only when Japanese enterprises possessed the technical knowhow to produce at a high minimum efficient scale (in order to compete with Western factories producing at that level) or when the Japanese market matured sufficiently to sustain economies of scope. In either case, such economies could not be realized in Japan at the end of the nineteenth century, and they were obtained only gradually some two to three decades after the sale of government enterprises to private industry in the 1880s.

#### 2. THE MODERN CORPORATION

#### Resource bottlenecks

In general, Japanese enterprises lacked the market, the capital, and the managerial sophistication of the Western competition. Without these, manufacturing pursuits proved frighteningly precarious. Even in textiles where labor costs were high relative to capital requirements for plant and equipment and where, and a result, Japanese spinning firms had a comparative advantage, Japanese companies could not compete on the basis of scale alone but relied instead on a combination of scale and scope. In addition to increasing the number of spindles employed and the speed at which they worked, textile makers depended as well on government subsidy, trade association standards and allotments, and trading company brokering. The latter were all based on economies which flow from joint production and distribution, that is scope, rather than scale.

Professor Hidemasa Morikawa has pointed out in a rather graphic manner how human resource bottlenecks held back the progress of the Japanese textile industry at the turn of the century.

After 1890, the three leading cotton spinning companies at that time, Amagasaki, Settsu, and Hirano, employed Kyozo Kikuchi as chief engineer and general manager at the same time. Kikuchi graduated from the School of Mechanical Engineering, Imperial University... He was a rare and valuable person who had mastered the advanced techniques of cotton spinning technology. He received a salary from all three companies, working in the morning at one company, during the afternoon at the second, and next morning at the third!<sup>2)</sup>

In capital intensive industries like petroleum refining and steel manufacture, Japanese firms lacked not only capital but also the managerial knowhow of

<sup>2)</sup> MORIKAWA, Hidemasa "The Significance and Process of Development of Middle Management in Japanese Business, Mainly in the 20th Century," in Keiichiro NAKAGAWA and Tsunehiko Yui (eds.), Organization and Management, The Japan Business History Institute, 1983, pp. 133-134.

someone like Kyozo Kikuchi. In the United States, the construction and integration of a national railway network had provided both the genesis of modern management knowhow and the complex managerial hierarchies in which such knowledge was encased. But the consolidation of the railways in Japan occurred largely under government hands.

It is important to recognize that the principal precursor to the modern industrial corporation in the United States was the privately-held and -operated railroad. The creation and consolidation of the railroad network, as Professor Chandler has emphasized, required a sizeable administrative organization—larger than anything previously seen in the United States. Not only large, railroad companies were specialized by function and region resulting, ultimately, in the formation of hierarchies of line and staff managers who pioneered entirely new sorts of administrative, accounting, and statistical procedures.

In the Japanese case, however, consolidation of the railway network took place under government control for the most part, even though privately financed and operated lines took the lead in the early construction of the railroad system. But most private lines failed or were failing when the government consolidated much of the railway network in the early twentieth century. Based on the Nationalization Law of 1906, the Japan National Railway bought six privately owned railway companies in 1906, eleven in 1907, and still more later. After purchasing the lines, the government set about to integrate them by reorganizing repair facilities, standardizing locomotives and rolling stock, scheduling preventive repairs, and working to monitor and streamline the flow of traffic.

As a result, the complex administrative hierarchies which were the result of railroad consolidation and of the operational requirements of railroads in the United States appeared not in the private sector in Japan, but instead in government hands. Moreover, government consolidation of the railroad network in Japan was not realized until the 1920s, some forty years after the same development in the United States. This too impeded the spread of complex organizational forms among Japanese manufacturing enterprises because manufacturing and distribution activities could not be combined or easily coordinated within the same firm.<sup>3)</sup>

As such examples from the textile and railroad industries illustrate, the reasons why companies, trade associations, and the government choose to cooperate together are not hard to divine. None of them had sufficient resources to launch an industrial takeoff on their own. Even in concert, they had few resources. Capital was scarce and the country needed schools, navies, and other infrastructure investments, in addition to factories. Even after troublesome and poorly understood choices were made between rival technologies and competing industrial products, and problems of how to produce the goods with just a few managers and techni-

<sup>3)</sup> Daito, Eisuke "Industrial Training and Factory Management in Japan, 1900–1930," in Nakagawa and Yui (eds.), *Organization and Management*, The Japan Business History Institute, 1983, pp. 65–66.

cians, with an untrained and untried factory workforce, and how to sell the products to an uninformed and generally poor population seemed insurmountable. As result, the main actors in this little drama of industrialization—the enterprises, the enterprise groups, the trade associations, and the government—had to work closely together not only for patriotic reasons but also for simple self-interest and survival.

# The lack of centralization and integration in business

Textile firms, considered as the vanguard of modern industrial enterprise in Japan, were surprisingly simple in organization until after World War First. The usual pattern was that a large number of stockholders/owners, numbering frequently in the dozens, supplied money while a smaller number of managers and a handful of technicians actually ran the operations. Raw materials and textile machinery were brought into Japan by trading companies and sold directly to textile firms which disposed of their finished goods to the same or similar trading companies or textile goods wholesalers. Because raw materials and machinery were acquired in this fashion and because finished goods were handled in this way, textile companies did not need managers to follow markets, schedule inputs and outputs, decide when to buy and sell, and perform what would otherwise be the functions of middle management.

The missing middle management functions were performed for them on the whole by specialized and later general trading companies and by traditional wholesalers. Accordingly, textile companies, like the private railroad companies, did not develop elaborate managerial hierarchies to plan, coordinate, schedule, and allocate. Their organizations remained comparatively simple in structure and their operations were not well integrated vertically until the 1920s. Textiles firms were, in our terminology, modern enterprises but not large modern enterprises.

What was true of textiles was generally true in other industries, like food and beverages, paper, clay/stone/glass. Even though the joint stock form of company organization became widespread by the beginning of the twentieth century, ownership was limited to fairly large numbers of the well-to-do or was concentrated in the hands of one or several families. In either case, there was little drive to consolidate management functions in a complex organizational hierarchy.

The spread of the joint stock company over single proprietorships and small-scale partnerships, as a result, should not be taken as evidence of the separation of ownership and control. Professor Matao Miyamoto, for example, argues that the initial tax law of 1899 and its revisions in 1905, 1913, and 1920, created a progressive tax system in which the incidence of taxation fell most heavily on personal wealth. Joint stock companies arose in part to thwart the progressive tax burden. Especially after the 1920 revision in which taxes were levied on dividends and bonuses paid to individuals, family controlled firms adopted the joint stock from of ownership as a means of reducing their taxes. This trend appears to have accelerated during the interwar period.<sup>4)</sup>

What was true for individual enterprises was often true for groups of affiliated

businesses as well, namely that they were not well consolidated and integrated as a group. In part, this was true because *zaibatsu* emerged as an amalgamation of unrelated enterprises at first, and only later, after World War First were these unrelated lines of endeavor gradually knit together into some sort of managerial synthesis. And this happened only after the holding companies and major operating companies of the enterprise groups hired sufficient numbers of university graduates to form a core of modern managers. University graduates did not figure significantly in holding companies and subsidiary operating companies until the interwar period.<sup>5)</sup>

Because there were few professional managers in prewar Japanese zaibatsu until the 1920s, holding companies were small and their functions were limited to financial matters for the most part. Holding companies enabled zaibatsu families to control their investments in operating companies at a time when they were growing rapidly and to ensure that family owners received a fair return on their investments. Holding companies performed few managerial functions for the group as a whole, and they did not act as a capital market to measure the performance of and allocate funds to subsidiary enterprises.

Zaibatsu holding companies, in short, were organized in large part to minimize taxes or to unify financial information for a group of fairly unrelated businesses under a zaibatsu family's control. They were small in size and they had few professional managers until after World War First.

They were only a little like the general headquarters office of American firms adopting the multidivisional form during the interwar period. They were somewhat more akin to the central offices of single-product, single-function firms dominating Western markets until this time, but even these U-Form firms were more complex structures, with larger managerial staffs and more varied functions than zaibatsu holding companies. This was because manufacturing was often separated organizationally from distribution in Japan, due to continued importance of the traditional distribution sector as well as to the brokering activities performed by specialized trading firms. Finally, we suggest that the deemphasis on distribution and marketing allowed firms to concentrate managerial resources at the level of the factory where the rapid adaptation and transformation of foreign technologies to the market and technical realities of Japan and East Asia became a hallmark of Japanese industrial strategy.

Non-zaibatsu holding companies in such industries as textiles and cement remained rudimentary as well. The managerial functions that they might have integrated within their structures and performed were preempted by trade association agreements or by mergers that did not involve significant centralization of produc-

<sup>4)</sup> MIYAMOTO, Matao "The Position and Role of Family Business in the Development of the Japanese Company System," in Akio Okochi and Shigeaki Yasuoka (eds.), Family Business in the Era of Industrial Growth, University of Tokyo Press, 1982, pp. 39-94.

<sup>5)</sup> Yonekawa, Shin'ichi "University Graduates in Japanese Enterprises Before the Second World War," Business History, 26-2 (July 1984) 193-218.

tion or managerial activities. Because companies grew through merger activity or horizontal combination without much vertical integration, centralization, and specialization, the integration of core management functions remained primitive. In many cases in such non-zaibatsu industries as textiles, cement, foods and beverages, horizontal combinations did not result even in the consolidation of production units while the highly developed network of traditional marketing middlemen obviated the need for horizontal combinations to do much about marketing and sales.<sup>6)</sup>

Zaibatsu operating companies were likewise lean in managerial functions. Trading companies must be blamed partly for this. They evolved somewhat more rapidly than manufacturing firms and they grew big by buying and selling agricultural and primary products, such as tea, rice, silk, cotton, coal, and nonferrous metals, before manufacturing and manufacturing firms played a major role in Japan's economy.

Even after World War First when manufacturing assumed significance in the Japanese economy, the main lines of zaibatsu business remained those that emphasized more the economies of scope than those of scale. Banking, shipping, warehousing/transport, merchandising, and trading are all businesses primarily concerned with scope, and as such it was necessary or even desirable to clearly distinguish organizational boundaries where the lines of business overlapped so.

Only in mining and textiles, to some degree, and in shipbuilding, to a lesser extent, were industries based on the economies of scale, and even these industries were dependent in important ways on those non-manufacturing lines of enterprise listed above. Shipbuilders, for example, depended on banks for financing, insurance companies for coverage, trading companies for orders, and warehouse/transport companies for traffic. Moreover, Japanese shipbuilding firms often made other heavy capital goods, such as rolling stock, engines, cranes, dry docks, electric machinery. So they may be said to have participated in the economies of scope in two ways: internally, by manufacturing related lines of equipment in their yards, and externally, by partaking of such related financial, leasing and slipping services that affiliated zaibatsu firms could provide.

Even after zaibatsu manufacturing firms begin to grow significantly in size and number, trading companies remain important because of their well-entrenched sales office network overseas, their crucial role in technology transfer, and their ability to profit from the economies of scope, that is their capability to carry more and varied products, and to move them quickly through their distribution pipeline at a reduced per unit cost.

Economies of scale, in contrast to those of scope, will be relatively less important where the market is small—too small for minimum efficient scale in product-

<sup>6)</sup> Professor Yoshitaka Suzuki's paper, "The Formation of Management Structure in Japanese Industrials, 1920-40," gives many examples of the failure of prewar Japanese companies to centralize and integrate their management functions.

ion—and where licensing and market sharing agreements are accepted and even promoted by trade associations, horizontal combinations, and the government. As scale economies were not emphasized, the cost per unit was relatively high. It made sense, therefore, for trading firms and for manufacturing companies within an enterprise group to attempt to maximize the economies of scope by fully exploiting a trading companies overseas network of offices and by emphasizing the production of a full-line of goods.

When manufacturers are not producing at the minimum efficient scale, then the availability of goods and their after-market service become more important than price. Manufacturers compete, as a result, on the basis of advantages in shipping, transport, distribution, finance, and such services that are provided by affiliated firms within the enterprise group. The critical role of trading companies in securing foreign manufacturing licenses, in providing replacement parts, and in arranging shipping and marketing schedules, become salient, and these should be linked with both the manufacturing as well as the non-manufacturing functions of the group as a whole. Overall, costs are economized more according to the ability of the enterprise group to carry and combine numerous lines of related products rather than to integrate and consolidate their efforts to mass produce a few standardized products.

In short, many of the forces driving American business toward organizational consolidation and integration in the late nineteenth and early twentieth centuries were lacking or largely attenuated in Japan: railways were consolidated mostly under government control; government-business relations were not antagonistic and no antitrust tradition emerged; textile companies concentrated on production without worrying about buying and selling, and thereby simplified their operations and management; joint stock companies grew in number and size in all industries but their increase cannot be taken directly as evidence for the spread of managerial capitalism; trading companies and zaibatsu groups of companies emphasized the economies of scope over those of scale.

Thus, the nature and degree of the obstacles to the formation of the modern corporation Japan in the late nineteenth and early twentieth centuries underscored the role and importance of other institutions, namely the government, trade associations and cartels, and group-affiliated ventures. Through the concerted effort of all these institutions, Japanese enterprises gradually gathered the resources necessary to compete at first on a regional, national, and eventually, an international scale. But the process of accumulating these resources took time and it required as well the cooperation of numerous institutions, so that the modern industrial corporation in Japan and the enterprise system which underpins the Japanese business economy are considerably different from comparable institutions in the Western World.

In summary, the Japanese enterprise system developed in an environment of severely limited resources which prompted the need for cooperation more than competition among major firms, enterprise groups, trade and manufacturing combinations, and the government. What evolved as a result was a network or web of cooperating parts which was not tightly integrated or coordinated. In large part,

this system worked because there were few opportunities for scale economies in the domestic Japanese market. In such a case, there was no drive to integrate mass production and distribution and no need for a corporate headquarters to coordinate the flows of goods, capital, and people, that mass production and distribution would require.

In short, there was an insufficient recognition of the possibilities for large hierarchical governance structures in early modern Japanese corporations because of the separation of production and distribution, the limited opportunities for economies of scale, the wholesale importation rather than internal accumulation of production technology, and the small size and nascent integration of head offices and holding companies as well as of manufacturing firms.<sup>7)</sup>

Finally, because scale economies were not salient, trade and manufacturing associations were effective in setting overall standards, dividing up the market, working with the government, and otherwise reducing the risks and managerial overhead which individual firms operating on the basis of scale economies would have to shoulder. In short, until the period between the two World Wars, economies of scale and the attendant organizational structures to maximize scale economies were not rooted in Japanese economic soil.

#### 3. THE LARGE MODERN CORPORATION

The large modern corporation appeared in Japan from the time of World War First as three critical conditions for the maturation of an industrial economy were met: the transportation infrastructure, under government leadership, was standardized and extended to the far corners of the Japanese empire; the market for Japanese goods expanded beyond the borders of Japan to East Asia, Southeast Asia, and even Europe; the product mix of Japanese industrial goods changed substantially from a concentration in light industry towards heavy industry, or from textiles, cement, and food to chemicals, transportation equipment, electrical machinery, and steel.

The latter are products of the Second Industrial Revolution, so called because England, known as the first industrial nation, ushered in the first products of the industrial age, principally iron and textiles. More sophisticated products, such as high-grade steel, gunpowder, cellulose, locomotives, and electrical generators and motors, came later with what is called the Second Industrial Revolution.

The demand for such new products accelerated dramatically in the early decades of the twentieth century, especially at the time of the Great War. Japan, alone among the industrializing nations, was removed geographically from the conflict and able to take orders from virtually all of the combatants. As the orders

<sup>7)</sup> WILLIAMSON, Oliver E. The Modern Corporation: Origins, Evolution, and Attributes. Center for the Study of Organizational Innovation, University of Pennsylvania, Discussion Paper #105, June 1981, pp. 29-32.

mounted, the size and sophistication of Japan's industrial complex grew, with the result that a new form of corporate organization appeared.

The large modern corporation is distinguished by much larger numbers of managers spread from top to bottom in the organization, a closer integration between production and distribution, more attention paid to both applied and pure research, a growing size and sophistication in head office functions and activities, new accounting and managerial tools, the appearance of product and corporate advertising, and the emergence of true scale economies in production in Japan.

At the apex of the Japanese corporation, new and clearly defined positions of great responsibility appeared for the first time. The title of  $shach\bar{o}$  or company president came into vogue. Boards of Executive Directors, where each director possessed well defined areas of responsibility, such as production, sales, and research, were created. Specialized staff functions proliferated to support top management.

Positions for executive secretaries and presidential administrative assistants were inaugurated. Being part of the President's staff came to be associated with power and prestige whereas a few years earlier no one would have recognized the importance of such positions when general managers and chief engineers formed the loci of decision making.

Company purchasing departments were founded not just to locate needed supplies and raw materials but to check on the quality, price, terms of delivery, and uniformity of purchases as well. Naturally, as companies came to rely more on their own resources for buying raw and intermediate goods, they likewise began to do more of their own distribution, advertising, and marketing. Research laboratories were established and staffed by university graduates with scientific and technical backgrounds. In short, the Japanese corporation began to come of age, to mature into a large, complex, functionally variegated, and multi-tiered organization. Managerial coordination became a necessity in such an enterprise.

Nevertheless, and this is extremely important, the head offices and corporate staffs of large Japanese companies never become quite as large and functionally complex as those of comparable leading companies in the West. Some of the reason for this may be the smaller size of the Japanese market at that time although it must be remembered that the large modern corporation appeared in Japan as markets for Japanese goods opened up worldwide.

More to the point, head offices and top management in Japanese companies remained relatively small because resources were consciously concentrated at the production level. Factories, especially "lead-factories," those facilities charged with manufacturing an enterprises' most sophisticated and demanding products, duplicated the growing complexity in managerial levels and functions found at the top of the corporate organization. They sprouted quality assurance offices, marketing research departments, sales offices, their own R & D capabilities, even their own personnel departments. And factory managers, like company presidents, were soon surrounded by a hive of clerical and technical specialists.

This new kind of specialization in management at the factory level should not be associated simply with labor management. Labor management, of course, is an important component of factory management anywhere, and especially in the early decades of the twentieth century as the Japanese economy shifted from a light to heavy industry base, labor management assumed crucial importance. But new demands on labor, and therefore on the management of labor, are only parts of the story of factory management at this time.

In terms of its importance and its function, Japanese factory management is much more akin to what is called middle management in the West. Factory management assumes such importance for two fundamental reasons. First, plant-level managers were charged with the responsibility of translating and adapting the flood of Western technology, associated with the products and processes of the Second Industrial Revolution, into goods that could be made by Japanese companies. Second, these goods were far more sophisticated and complex than the products of the First Industrial Revolution, and they required a kind of R & D, technical support, after-sales service, and general marketing that neither the traditional distribution system nor top management for that matter could provide. In short, factory managers had to make industrial goods requiring new levels of complexity and knowhow in production technology, and then sell or at least get out the door what they had made themselves.

Such responsibilities did not belong to "lower" managers. Indeed, factory management was and still is a springboard to higher management in Japan. Especially when companies were mostly single-product firms and when factory-level experience in new products and technologies was critical, factory managers became the large modern corporation's front line of management. The weight and importance of factory management in Japanese corporations is unusually significant.

#### 4. THE EXTENDED LARGE MODERN CORPORATION

#### Attributes of the postwar corporation

The large industrial enterprise in postwar Japan represents an extension rather than an alteration of the pattern of corporate development already established before World War Second. The reasons for this are both macro- and micro-economic. First, the macro-economic policies of industrial planning and resource allocation that were established during the 1930s with the militarization of the political economy were continued in spirit and sometimes in substance during the military occupation of Japan from 1945 to 1951, and even thereafter for much of the 1950s and 1960s. Until the late 1960s' initiatives to liberalize the capital and financial markets of Japan, government controls over foreign exchange licenses, interest rates, loan requirements, and tariff schedules, defined the environmental parameters within which all major corporations in Japan were forced to act.

The stability and rigidity of governmental controls encouraged corporations to preserve past practices and forms rather than to experiment and innovate. At the

microeconomic level, therefore, corporations extended the basic U-Form organization which had been established before the war. As large corporations became larger, they continued to maintain a functional structure which localized production in factory-level organizations while sales and planning functions were extensions of the head office organization. The basic point is that production and sales were not integrated into functional units organized by product and market, as in the divisional form of organization which became the most popular form of large corporate organization in the Western world after World War Second.

Even as Japanese companies became worldwide competitors in shipbuilding, machinery, steel, textiles, and electrical equipment, they did not adopt a Westernstyle multidivisional form of organization. Instead, they stuck with what they knew best, the basic U-Form of organization, and modified it in two ways. Major Japanese firms moved toward what might be called pseudo-divisionalization by creating numerous product-focused functional units within their overall corporate structure, and another past tactic of organizational development—the forming of corporate confederations—was employed.

Pseudo-divisionalization refers to the forging of division-like structures which are responsible for most of the major decisions affecting a particular product-market area within an enterprise. In the electrical equipment industry, for example, Matsushita Electric Industry continued with its divisional form of organization wherein each major product group was responsible for product design, engineering, production, and sales forecasting. Hitachi was similarly organized except that factories rather than divisions became the core of product planning and production. But in the case of both Matsushita Electric Industry and Hitachi, the sales, distribution, and marketing functions were not localized in either divisions or factories. These functions were carried out in field or central offices which were attached to the head office. In short, production and sales were not integrated within a divisional level organizational structure.

Exceptions to this trend within the electrical equipment industry emerge when consumer electronics firms, like Sony, Sanyo, and Sharp appear. These companies are postwar firms without any loyalties to traditional ways and forms of doing things. Moreover, they are firms that specialize in catering to the changing tastes and whims of increasingly affluent and restless global citizens. Close coordination between market research, marketing, and product design are absolutely essential. These enterprises are exceptional in postwar Japan in that they have adopted true multidivisional forms of organization that maximize the connection between manufacturing and marketing.

Nevertheless, Japanese enterprises never attain the same size and complexity in organization as do their Western counterparts. And this characteristic of major Japanese firms has held constant as domestic and international markets for Japanese companies have expanded dramatically and as various pseudo-divisional and divisional forms of organization have been adopted.

Japanese firms tend to remain small in size and specialized in function because

this allows them to maximize two important economic advantages: economies of scale and economies of value engineering. The two are obviously related. Declining costs per unit of production are directly connected to economizing efforts in the steps of production, the quality of production, and methods of production. The economies of value engineering are analogous to what is more generally known as the economies of the learning curve, namely that costs per unit of production are a function of accumulated experience. The economies of value engineering differ from those of the learning curve in that the concept of quality is just as important as that of quantity.

But small and specialized are not enough today. Complex products may require many high-precision parts involving overlapping technologies and their marketing may demand highly market-specific knowledge and resources. Japanese companies overcome the disadvantages of small size and functionally specialized activities by forming confederations which in concert provide a complete range of business services and which take advantage of two additional economies: those of scope and transaction cost economies.

Economies of scope occur when the unit costs per transaction are lowered through joint or shared production and distribution. A good example of this might be the production of motorcycles, snow mobiles, and sea scooters using the same basic engine or the addition of a line of speciality cosmetics to a distribution channel already carrying a number of womens' beauty and health products.

Transaction cost economies are concerned with organizational governance, that is with the way the organizational is managed in terms of the number and distribution of managers. Transaction cost economies occur when organizations coordinate various facets of their operation without delegating many managers or special levels and offices to the maintenance of those coordinating activities. Typically, they are relatively few persons assigned to coordinate cooperative activities when groups of enterprises combine together in Japan. Instead, most managers in the companies involved consider it their responsibility to work closely and communicate effectively with affiliated firms but these responsibilities are in addition to rather than in place of their existing duties. As a result, Japanese enterprise networks can overcome the disadvantages of the small size of individual firms by grouping themselves together without increasing the managerial overhead to carry out successfully coordinating activities. Transaction cost economies are the result.

#### Postwar enterprise groups

Japan, more than any other industrialized nation, has been the stage for the development of large families of interrelated enterprises. The individual companies which make up such federations may be large or small but the sum total of economic activities within a group of affiliated enterprises is often huge. No other country has business groupings of the size, range, and significance of those found in Japan.

Enterprise groups in Japan represent a genuine organizational innovation: an economic institution created in Japan but with global implications. According to a report written by the Britain-based Dodwell Consultants, the largest 16 keiretsu groups in contemporary Japan comprise 920 companies or less than 0.1% of all Japanese firms excluding banks and insurance companies. But as of March 1981, these 920 companies employed 10% of the Japanese workforce and contributed some 24% of the annual sales of Japanese companies. In fact. the largest six enterprise groups among the 16 accounted for 18% of total annual sales.<sup>8)</sup>

An enterprise group is a collection of firms wherein companies or subsets of companies coordinate their activities and cooperate in various ways for various reasons. Coordination is concerned with joint production and distribution to take advantage of economies in scale and scope. Cooperation might consist of the sharing of resources, such as warehouses and wharves, an agreed-upon allocation of raw materials of resources, such as differential shares to the output of a petroleum refinery, or even alternative access to the same resources, such as the consecutive use of a wind tunnel testing facility or of a company vacation lodge. Companies might agree, formally or informally, to share the development costs of a new product line, they might fix prices among themselves, or they might consent to constitute an internal market among themselves for a product which does not have yet (or perhaps never will) the economies of scale and scope to guarantee its success on the open market.

The reasons for cooperation could be many, including historical, financial, organization, and managerial reasons. Because the forms of possible cooperation are numerous and because the reasons behind such cooperation are countless, companies and divisions of companies making up the enterprise group as a whole vary enormously in the degree of integration or in the amount of "fit" that characterizes the cooperation within their overall activities and the coordination of their production and distribution.

Broadly speaking, the notion of "fit" or the degree of interaction that characterizes enterprise group activities can be pursued by dividing companies comprising an enterprise group into inner and outer tiers, and these, in turn, may be classified further by whether the ties to the core companies of the inner group are primary or secondary. Primary ties require coordination, and these would be financial, technical, and contractual ties, while secondary ties tend to be historical, organizational, and sometimes managerial, and thus fall under the category of cooperation as the term is used here. (The Japanese themselves sometimes categorize ties by the terms *chokkei*, *bōkei*, and *shitauke*, or wholly- or substantially-owned companies, partially owned firms, and subcontractors; this typology probably focuses too narrowly on the matter of ownership, even if ownership in the Japanese context often has important managerial implications.)

<sup>8)</sup> Kerns, Hikaru "Tokyo's monopoly game," Far Eastern Economic Review. November 24, 1983, pp. 72-74.

Thus, from the standpoint of the group as a whole, member firms are distributed along two continuums—one where ties are substantial and concrete and require close coordination of activities within, between, and among first- and second-tier companies, and another where ties are less clearcut and demanding. For individual firms within the group, the picture is less complicated. Companies may depend upon one or several enterprises for coordination and cooperation in such matters as production, marketing, purchasing, and finance.

Networks of firms where managerial coordination is maximized may involve hundreds or even thousands of closely interacting enterprises. It is important to emphasize that these interfirm cooperative structures are much more than subcontracting networks. Subcontractors may be a term appropriate to some companies in such an enterprise group but subcontracting implies a very unequal power relationship among firms. Many firms in large networks are financially and organization independent for the most part, and thus more akin to affiliates or associates than subcontractors.

It is this quality of relatively equal power relationships in interfirm networks, which enables them to achieve coordination without centralization. Because companies are financially and organizationally independent for the most part, they are not tied together and direct by several levels of integrating management. Yet because tightly-coupled transactions in manufacturing and marketing bind companies together, high levels of interfirm coordination and interdependency are achieved.

Core companies, as their name implies, are at the center of planning, coordinating, and allocating activities for the group as a whole. Such companies are typically large banks, trading companies, and major manufacturing firms making either producers' or consumers' goods. Before the war, holding companies were also part of the core group as they were important for controlling and integrating investment for the group. Since the war, holding companies were disbanded by the Allied Occupation of Japan, 1945-51.

The directors and top executives of core companies meet frequently to ensure cooperation in the overall activities of the group. Meetings may be formal as in the well publicized monthly meetings of Mitsui, Sumitomo, and Nissan, or they may be informal but not less important for the exchange of vital information and opinion on which large group cooperation depends.

The Mitsui group of companies today, for example, has 24 companies that belong to the Nimokukai, an inner group of company presidents which meets on the second Thursday of each month. But there is also the Getsuyokai group of 62 companies which meets on Mondays and the  $k\bar{o}h\bar{o}iinkai$  or information group whose members meet once a month. Membership in these groups may overlap for the presidents of powerful Mitsui companies while the presidents of smaller enterprises and of less powerful or less strongly affiliated firms may attend only one such meeting per month.

Informal meetings may occur anywhere and with considerable frequency. The

business elite of Japan prefer to hobnob in exclusive downtown restaurants and hotels and, if the occasion permits, in mountain or seaside resorts. Corporate leaders also hold meetings within smaller groups or subsets of firms in order to coordinate matters particular to those sub-groups.

Because enterprise groups are mammoth organizations with as many as several thousand companies in a larger group, and because the boundaries between firms within a group may change, it is impossible to characterize the nature of economic activities within a group as a whole. Ideally speaking, it may be possible to say that groups attempt to expand their business activities into all areas, and to do so, both by enlarging the range of existing businesses and by initiating endeavors in new areas.

Nevertheless, the lineaments of the past in the form of knowledge, investment, and experience in certain sorts of activities tend to delimit the sphere of business activities undertaken in the future. Moreover, the past shapes the way in which business structures are molded and managed in the present and in the future.

The special quality of intergroup coordination and cooperation in Japan is not found in the notions of coordination and cooperation between divisions and companies of the same enterprise group. That, too, or something close to that is found in the West. The specialness is derived from several differences. First, coordination and cooperation are assumed to be effective rather than the opposite. Second, coordination and cooperation, both formal and informal, takes place within a much larger group of directly and indirectly affiliated firms, and these activities are not limited by the size or pervasiveness of ownership ties between firms. Finally, intergroup cooperation is buttressed by the legal, financial, and managerial traditions of Japane's society.

## The corporate past and corporate growth

Large Japanese companies and the groups of related enterprises which cluster around them have followed a rather different course of development than large corporations in the West. In the West major firms have become large through the process of integrating their activities within a single vertical market segment. Firms grew large by concentrating production, integrating forward, that is by investing in and developing facilities and personnel to sell and distribute their products, and then sometimes, by integrating backward, that is by controlling through purchase the raw and semi-finished materials on which the company's manufacturing activities depend. Sometimes companies invested in research and development as well, as a way to facilitate the integration of their operations.

Once integration has been achieved, managers of large firms in such industries as copper smelting, electrical equipment manufacture, and petrochemicals, typically look around for new areas of activity and, not surprisingly, find them, at least in the beginning, in related fields of business. As time goes by, less related areas of business are considered and entered into, and the firm becomes more fully diversified in providing a wide range of goods and services. Professor Alfred D.

Chandler, Jr. has shown how large firms in the West typically adopt a multidivisional structure as they employ the strategy of product and market integration and diversification.

But Japanese companies which belong to an enterprise group do not attempt to incorporate all of these integrating and diversifying activities within a singly, multidivisional structure. Instead, separate firms are established or are encouraged to undertake specific activities within the group structure as a whole. These firms are designed to integrate and diversify economic activities in terms of the total business of the group rather than as a sole company's mission "to conquer the world." The main thrust of upper management's task, in the case of Japanese enterprise groups, is to coordinate the activities of these separately incorporated entities while the thrust of management in large corporations in the West has been more often the creation of competitive and innovative initiatives within a single, often enormously, large multidivisional company. This has required the creation of a large head office and many special staff positions to coordinate the flows and functions of a multidivisional firm in the West but the same has not been true in Japan.

Because individual companies are small and independent even if the enterprise group is large, the leading companies in such groups are surprisingly small. Toyota is only one-half the size of General Motors, for example, and Hitachi is only one-third the size of General Electric. Furthermore, within Toyota and Hitachi, managerial resources are concentrated much less at the general headquarter's level and much more at the production level than their American counterparts. Such fundamental differences necessarily result in distinct approaches to business organization and performance.

The nature of industrial group enterprise in Japan has important consequences for new investment in start-up ventures as well as for the manufacturing and marketing of new products by already established companies in the group. In the case of start-up ventures, capital is likely to be raised, borrowed, or, more likely than not, allocated among member firms in the group, so that no single firm contributes an usually large share of the new investment. Thus, the current product lines or possible future products of existing companies are not jeopardized by a decision to invest in a new area of business. No single firm in the group has to invest that much in the new proposition.

The best examples of this group investment allocation process would be the building of numerous petrochemical complexes, called *combināto*, during the latter part of the 1950s. The capital requirements were so huge and the time horizons for profitability so long that no single company or even small group of companies could have afforded the investment and risk on their own. Indeed, Nihon Soda left the Mitsui group of companies because it did not want to participate in a required investment allocation of this sort. But this may be the exception that proves the rule. By allocating investment shares among many interrelated firms, the problems of raising capital and of risking capital for individual enterprises are minimized.

Moreover, all of the firms in the group which have invested in the new venture will have access to its market intelligence, R&D, product planning, intermediate products, and the like, so that the business strategy of the group as a whole can be hopefully consolidated and integrated. In short, new businesses in an enterprise group, either as start-ups or as spin-offs, do not endanger the continued existence or even the flow of capital, information, or personnel to established firms in the group.

Thus, the mechanisms of corporate growth in Japan differ markedly from those in other cultural and corporate environments. In the realm of vertical integration and diversification, for example, it would seem that Western firms prefer to integrate new corporate initiatives as divisions or as subsidiaries within the same corporate structure, while Japanese firms in enterprise groups do no appear to do so for the most part. As a result, giant multidivisional organizations are the rule in the West while Japanese companies, taken on their own, tend to be smaller, more focused in product line, and less vertically integrated in structure. This is the case in large part because of their membership in large families of affiliated enterprises.

Nevertheless, Japanese firms grow in size, sale, and market share, like their Western counterparts, but they appear to do so by relying on a network of related enterprises, some of which are wholly owned and others of which are only partly owned by the group, in order to gain the economies of scale and scope which all companies desire. Accordingly, Japanese companies have to place more emphasis on the matter of external coordination between member firms in a corporate network or what I am calling competitive cooperation and coordination than do Western firms.

Such significant differences as these which are found in Japanese industrial structures as compared with Western manufacturing organizations should not be ascribed now as they have been in the past, to backwardness of Japanese industry, and therefore, to technological disparity. This explanation has been employed throughout this century to explain differences in industrial structures between Japan and the rest of the world. Yet today Japan is one of the leading nations of the world in production technology and this preeminence should erase any notion that differences in Japan's corporate and industrial structure indicate technical backwardness and organizational inferiority relative to the West.

More importantly, such differences persist in spite of the fact that manufacturing technology in contemporary Japan is largely the same as that found in the West. Also, the success of Japan's postwar economy has meant that the most successful Japanese firms have grown large, not as large as the most successful manufacturing firms of the West, but nevertheless large. And, since the end of World War Second, the Japanese have energetically studied Western management education. They have carried back to Japan nearly every new theory and technique of Western management during the past 30 years.

But in spite of the similarities in the size, technology, and management techniques of Japanese and Western industrial enterprise, substantial and significant differences in corporate structure, style, and strategy remain. Japanese enterprises

are different, and the heart of these differences are found in the nature of industrial group coordination, control, and cooperation.

To summarize the argument so far, Japanese firms, in contrast to Western enterprises, rely more on external coordination among member firms of a corporate group than they do on internal integration and diversification of more and more activities within a single corporate entity. Of course, Japanese firms, like their Western counterparts, seek to reduce costs and to use resources more efficiently. They do this in part by transaction cost economizing through the coordination of many cooperating enterprises and by a aligning the managerial resources of many firms in the interests of the industrial group as a whole. While this may reduce the profits which might accrue potentially to one or a few firms, it reduces likewise the risk that one or a few enterprises would have to assume and be prepared to accept. If competition results in wither losses or gains, then every enterprise in the group which is involved in the transaction ought to share in those profits or losses. In short, their share should be proportional to the risk which whey bear in common.<sup>9)</sup>

Thus Japanese enterprise networks are highly integrated and diversified as groups of affiliated enterprises, even though single firms within such groups are smaller, less integrated vertically, and more focused in product line, than comparable Western concern. The large scope of activities carried on by the group as a whole attentuates the need (and perhaps the desire) of one company to increase greatly the scope of its operations, especially outside of the boundaries where it is comfortable with market and technological circumstances. This was especially evident in Japan before the Oil Shocks of the 1970s when the pace of business expansion within the national and international economy all but eliminated the need for companies to seek alternative uses for corporate resources in order to guarantee acceptable levels of profitability. Also, the smaller size of individual Japanese firms in the first place means that less attention will be paid to alternative uses of company resource. A smaller sized company results in less slack.

By concentrating resources on fewer products and more specialized markets, Japanese firms, especially the leading firms in enterprise networks, often achieve astonishing rates of growth in sales and profits. Some of the high-flying Japanese firms of recent years, such as Kyocera, Fanuc, Canon, and even Matsushita Electric Industrial, are essentially single-product companies. But it is important to recognize that the single-product accounting for 40-70 percent of sales, be it IC ceramic packages, NC devices, cameras and later copiers, or VTRs, is not always the same. What was big for Matsushita Electric Industries in 1960 was not its big seller in 1965, 1970, 1975, or 1980. MEI can shift its product focus and therefore

<sup>9)</sup> See ROEHL, Thomas's approach to transaction cost economizing in a Japanese general trading company, "A Transactions Cost Approach to International Trading Structures: The Case of the Japanese General Trading Companies," *Hitotsubashi Journal of Economics*, 24-2 (1983) 119-135

<sup>10)</sup> Banri Asanuma, "Jidosha Sangyo in okeru Buhin Torihiki no Kozo" (Parts acquisition in the Automobile Industry), Gendai Keizai, Summer 1984, pp. 38-48.

its profitability so quickly because it is not an integrated, mammoth corporation characterized by bureaucratic inertia. Instead, it is a rather small (62,000 employees is small compared to General Electric or Phillips) disintegrated firm that depends on its affiliates and subordinates to develop and manufacture most of its products. Those that do well in the marketplace become the new cohort of products that power MEI to ever higher levels of sales and revenues. Like the rising sap in Spring, the ideas, inventions, and innovations of low-level firms in an enterprise network are sucked up and expropriated by the apex enterprises in the system.

Finally, a single firm within a enterprise group may not have the ability or the independence to integrate or diversify as it desires. This has occurred apparently when individual enterprises within industrial groups have not been able to resolve differences over which firms should be allowed to integrate or diversify in which directions. In petrochemicals, for example, the Mitsubishi group has a half-dozen companies making a range of fairly similar products. Working out a mutually agreeable strategy of growth for so many closely coordinated firms has proven to be a vexing and, at times, conflicting issue for the Mitsubishi group. And the same could be said for other groups as well.

# Contemporary enterprise groups

There are six major enterprise groups today: three derive from prewar zaibatsu groupings (Mitsui, Mitsubishi, and Sumitomo) and three emerge from the postwar regrouping of firms around important city banks (Sanwa, Daiichi Kangin, and the Fuyo group). This representation of enterprise groups relies heavily on the concept of historical continuity, however, and it should be underscored that not all contemporary enterprise groups have their roots in the prewar period. Furthermore, as the table below suggests, the degree of intergroup shareholding varies significantly depending on whether or not the groups were reorganized after the war. The range of intergroup shareholding is generally between 10 to 25%, with the traditional groups (Mitsui, Mitsubishi, and Sumitomo) falling on the high side and the post war reorganized groups on the low side.

It is important to realize that the sense of common purpose and cooperation in

Group	1961	1963	1965	1967	1969	1971	1973	1975	1977
Mitsui	11.23	9.63	10.04	11.58	13.10	14.65	17.25	17.23	17.47
Mitsubishi	21.27	17.75	17.20	16.94	19.47	22.74	26.04	26.41	26.78
Sumitomo	22.94	19.19	18.79	19.03	21.26	22.62	24.39	24.71	24.79
Fuyo	13.10	10.34	10.85	12.33	15.47	16.99	18.76	19.23	18.64
Sanwa	8.43	9.96	9.02	9.61	10.86	11.19	12.21	13.15	11.72
Dai-Ichi	14.70	10.14	10.26	12.62	15.66	15.21	15.23	16.76	16.79

Table 2. Intergroup Shareholding, 1961-1977 (Odd Years Only)<sup>11)</sup>

Source: Yoshihiro Kobayashi. Kigyō Shūdan no Bunseki. Hokkaido University Press, 1980, p. 132.

Japanese enterprise groups is not based on ties of ownership to any significant degree, as the table above indicates. The degree of interfirm shareholding is not especially high, and the credit dependency of manufacturing and marketing firms within a group upon group banks and financial institutions has been declining steadily for the last decade.

Especially since the oil shocks of the mid-1970s, the ways in which enterprise group firms raise capital has changed noticeably. Bank borrowing from group member banks, as mentioned above, has declined by ten percent or more. Self-financing through retained earnings and share participations has increased instead. Most significantly, with the liberalization of capital markets at home and abroad, Japanese companies have gone to foreign markets with increasing frequency. They now have much more latitude than in the past as to what capital instruments to use to raise investment funds, what currencies to use in order to carry out transactions, and in general how and where to raise cash. This means that companies within enterprise groups are free to choose their own financial future. <sup>12)</sup>

Accordingly, cooperation among firms and coordination between them, which is its result, originate for a variety of reasons, only a few of which could be said to be directly connected to issues of ownership and control. Ownership, in today's mammoth and far-flung business empires in Japan, is hard to pinpoint. Even after the ultimate sources of equity and debenture capital have been identified (and that in itself would be a Herculean task), it would be more difficult still to determine what role ownership plays in industry structure and decisionmaking.<sup>13)</sup>

#### The new enterprise groups

There are other enterprise groups (other than the six just described) in Japan for which history is not important, either because they were established recently or

<sup>11)</sup> Kobayashi's figures were based on the following:

<sup>1.</sup> Intergroup shareholding was calculated on the basis of outstanding, publicly listed shares.

<sup>2.</sup> Shares held by group trust and savings banks were included in the figures given.

<sup>3.</sup> The following seven companies were not included in the figures given for the Fuyo Group: Nisshin Seifun, Toa Nenryo Kogyo, Kubota Tekko, Hitachi Seisakusho, Tobu Tetsudo, Nissan Jidosha, Keihin Kyuko.

<sup>4.</sup> Kobayashi's sources were: Keiretsu no Kenkyu—Daiichi Jojo Kigyohen, annual volumes on enterprise group activities published by the Keizai Chosa Kyokai.

<sup>12)</sup> Since the 1970s and the capital market liberalization in Japan, Japanese firms have far more choice about where and how to raise capital than in the past. For a detailed discussion of this issue, see Yutaka Inoue, "The Many Forms of Financial Manuevering by Big Business in Japan," Nihon Keizai Shinbun, Dec. 20, 1984, p. 15.

<sup>13)</sup> Since the 1970s, the period covered by Kobayashi's statistics, the government has moved to limit increasing intergroup shareholding in those groups with a substantial financial infrastructure, that is the six major contemporary enterprise groups. More purely manufacturing groups, like Hitachi and Matsushita, however, have not had any such restrictions imposed on them.

because their history is not particularly significant for understanding their importance today. Among such enterprise groups would be found some of Japan's most famous international firms, like Sony, Matsushita (Panasonic, National, Techniics, and Quasar brand names), Toyota and Honda, as well as other companies that are less well known overseas but which are no less important domestically. These firms are also collections of companies in the aggregate, often numbering in the dozens, hundreds, or even thousands of enterprises, and these conglomerations of companies coordinate their activities in ways that are similar to, but not necessarily identical with, the methods of the older, better known industrial groups.

The new enterprise groups may be divided into three types. First, groups that have combines to achieve economies of scale in manufacturing and to take full advantage of opportunities for intermediate product processing by sharing costs and by coordinating production. Such groups typically specialize in producer goods and the best examples are the five groups of firms in the postwar steel industry.

Shin-Nihon Seitetsu, Nihon Kokan, Kobe Seiko, Sumitomo Kinzoku, and Kawasaki Seitetsu, lead combinations of a half-dozen to a dozen companies that are highly integrated vertically but not at all diversified by product or business service. Although some of the companies in these combinations may have evolved from prewar zaibatsu groups, they belong neither to the successor groups of the zaibatsu nor to the newer, product-service or consumer goods companies of the postwar era. These are groups organized to achieve economies of scale in manufacturing.

A second type of new enterprise group also concentrates in producer goods but their strength and cohesion are derived less from economies of scale and scope in manufacturing than from the provision of specialized marketing and technical services. This is not to say, of course, that manufacturing costs are unimportant to the viability of these enterprises. The best examples of such firms are those which offer data processing services and specialized machinery for factory or office automation. These goods require customized installation, repair, and credit services. The process control devices, the ATM machines and the traffic/factory control systems manufactured by the Omron Tateishi Company, for example, are representative products of this type of enterprise group. Fuji-Xerox's office automation equipment provide yet another example. These are not quite the producers' goods of old and neither are they the consumers' goods of today. Such companies and groups emphasize high volume throughput in order to achieve minimum efficient scale but they depend strongly on specialized marketing services to win and to retain the limited customer pool for their goods.

Finally. the most noteworthy and conspicuous new enterprise groups are those which make branded consumer goods in large volume and which have created new channels for the sale and distribution of those items. Because consumer-oriented, mass market products were new to postwar Japan, the emerging enterprise groups which specialized in goods of this sort were unable to rely on neither the sales and distribution networks which had been established for the older, industrial goods of the prewar era nor the existing marketing channels that carried such retail items as

bulk foods and tailored clothing. As a result, new distribution channels, including new ways to deliver products to market (principally by truck rather than by train), new product and credit financing, as well as new sales and servicing arrangements had to be forged within Japan.

Also, because the initial market focus was within Japan and because individual consumers, and not corporate clients, were the final users, prewar institutions like trading companies which specialized in the bulk sale of raw and intermediate products to corporate users were not appropriate vehicles for the sale and distribution of consumer goods in postwar Japan. Similarly, the emphasis on consumer goods led to a deemphasis on banking services as a core function in the newer enterprise groups. Not only were the size and volume of purchases by the firms in the consumer-oriented, new enterprise groups smaller than the typical, large purchases of the older group firms but also the end users themselves were small families and individuals for the most part, and they did not require the existence of core companies providing banking and financial services. Instead the newer consumer-oriented companies have developed credit and installment-purchase schemes geared to the needs of the typical urban household. Such differences as these have resulted in new, postwar enterprise groups which are significantly at odds with prewar enterprise groups in terms of their form, function, and style.

Likewise, corporate finance in the new groups was different. As new consumer markets matured rapidly and as the new manufacturers of consumer goods prospered, they often freed themselves of an initial dependence on the banking and financial services of particular institutions. This was the case, for example, with the Matsushita group of companies which had borrowed heavily in the early period of their history from Sumitomo sources. But through rapid growth in sales and market share and by the frequent issue of common share offerings which returned high rates of dividends to shareholders, the Matsushita group was able to self-finance successive cascades of enterprise group expansion. Fortunately, the unusually strong growth of the Japanese economy from the 1960s allowed this risky strategy of capital development to succeed for the Matsushita group as well as for a number of other consumer goods companies.

#### Old groups and new groups

The most obvious difference between the two types of groups—prewar and postwar—is size, but size itself is a function of history and structure. The prewar zaibatsu groups which have persisted in the postwar period or the postwar city-bank groups are conglomerations of companies of some firms with more than a century of history and others with just a few decades of operation. But in either case as members of a traditional enterprise group, the group as a whole has time to develop its. resources, elaborate its form, integrate and diversify its activities. The newer and more product-focused groups of the postwar period have not had the same amount of time to grow and mature, and their smaller size and more focused activities result in their common designation as "independent enterprise groups"

(dokuritsu kigyō gurūpu).

A second reason for the difference between the two types of groups has to do with function, that is with what is done and how it is accomplished. The six major enterprise groups are full-service, largely integrated, and well diversified, with their own financial, shipping, marketing, as well as manufacturing resources in many different product areas. Although the large size of such groups may result in some bureaucratic inertia, intergroup sectionalism, and sometimes even in low performance (sub-goal pursuit), size is nevertheless a major characteristic of the older enterprise groups.

In general, the newer groups are smaller, less integrated, less diversified, and less able to muster non-manufacturing resources of various sorts. If they have their own trading companies, they are noticeably smaller than the trading companies of the major groups. They rarely have their own banks, shipping companies, and insurance firms. Perhaps most importantly, they are more focused in their activities—in the types of manufacturing processes employed and in the sorts of products made. In numerous ways the smaller size of the newer groups can be an advantage, since it may reduce bureaucratic impediments to joint R&D for example. So size is a principal criterion for distinguishing the two major types of enterprise groups found in Japan today, but size differentials are simply a shorthand for suggesting a range of basic differences, historical as well as organizational, which divide these two sorts of groups.

The structure of the older enterprise groups in Japan, by contrast to the newer business combinations, puts an emphasis on increasing yield more than reducing costs, since maximizing the flow through member banks, insurance companies, trading firms, and large manufacturing units is emphasized. This is necessary in order to keep the group as a whole, with its high fixed costs invested in the economies of scope, functioning properly. Such groups are characterized by high volume throughput of related goods and services with some attention to minimum efficient scale but without much in the way of marketing services. This does not mean that the older groups do not want to reduce costs, cut overhead, and generally "lose weight," but that their very size, bureaucratic tendencies, and overall high level of integration make this difficult to accomplish.

The new enterprise groups, in turn, emphasize cost reductions in production among member firms, and they pay considerable attention to sales and distribution. They tend to be more forward integrated as a result than are the older groups. Because the newer groups developed in the postwar era they have depended on the growth of domestic as well as overseas markets and on consumer goods more than producer goods. Manufacturing as well as marketing costs have been scrutinized. Firms belonging to the newer enterprise groups more closely approximate their Western counterparts, in that production and distribution are more closely coordinated, and that they are more likely to be combined within the same firm. Also, economies of scale are emphasized strongly in the new enterprise groups since they have to rely more on price competition rather than product

availability to sustain market sales. The different sorts of products made by postwar enterprise groups have resulted in different kinds of cost reduction efforts, both in production and in distribution.

In summary, companies in older enterprise groups tend to be interrelated more in a horizontal than vertical fashion. They appear to be tied more by non-manufacturing ties, such as those that spring from finance and trading, than manufacturing ties, and they profit more from the economies of scope than those of scale. The new enterprise groups are more vertical in nature, that is they emphasize scale more than scope economies, and as a result they exhibit high levels of interdependent asset-specific investment in manufacturing as well as distribution in order to coordinate their efforts as product-centered groups.

#### CONCLUSION—A JAPAN-US COMPARISON

The industrial structure of modern Japan and the amazing postwar performance of the Japanese economy are linked together through the activities of industrial groups in Japan. These families of firms, numbering in the hundreds of enterprise units, underpin and intertwine the economy at all levels and in most ways.

Industrial groups and the enterprise system in Japan represent a new way to organize managerial functions. This new approach to capitalistic organization overcomes the demerits of the past—the dependency on foreign technology, the separation of production and distribution, the lack of a clearcut drive to centralize production and management functions, the preference for small, specialized managerial hierarchies—and turns them into contemporary strengths. Not only have industrial enterprise groups learned to cope with adversity and overcome it with a strategy of coordination and cooperation among all the enterprises in a group but they have learned how to cope effectively with the government, trade associations, independent manufacturers, and a host of other economic institutions as well.

In contrast to large Western corporations, industrial groups in Japan tend to grow by adding new units or enterprises to the group as a whole rather than by adding or integrating new functions to already existing corporate structures. This means that while the size of individual Japanese enterprises may be smaller than that of comparable Western firms, there are likely to be many more units in an industrial group in Japan than there are in the multidivisional, multiproduct, global Western firm—the functional equivalent of the Japanese enterprise network.

Larger firms, by definition, are more formalized and bureaucratic than smaller ones. Smaller forms should be more flexible, less rigid in structure and operations. Part of the reason for the smaller size of Japanese firms is undoubtedly historical, namely that the later industrialization of Japan has meant a shorter period of time for Japanese firms and markets to mature as compared with the advanced industrialized nations of West. But part of the reason is organizational as

well, since Japanese industrial groups simply prefer to split up their operations into separate enterprises when it is feared that companies have grown too large and cumbersome. Of course, the two reasons could be interrelated since the shorter period of maturation for Japanese business may have resulted in an engrained preference for smaller rather than larger corporate organizations.

Japanese companies typically lack the large superstructure characteristic of the general offices of a Western multidivisional enterprise. Instead of internalizing the managerial functions that a strategy of integration and diversification requires, Japanese enterprise groups have externalized those functions, that is they have learned to coordinate the efforts of a number of separate companies in a group to achieve the same ends. This is one reason and probably the most important one for the prominent part given to business entertainment after normal working hours in Japan. In fact, the "after hours" (to use David Plath's term) are an integral and necessary part of doing business in Japan where many of the control and coordination functions of a business group are not well internalized in large divisional and general headquarters, offices.

Significant differences exist within Japan between the successors to the prewar enterprise combines or zaibatsu and the newer, postwar enterprise groups. Most significantly, the structure of the older enterprise groups, centered on the banking, trading, real estate, and heavy industrial functions of core companies, tended to put more emphasis on the economies of scope. Such groups with high fixed costs concentrated in core functions emphasized the maximization of flow through their banks, trading companies, and manufacturing affiliates. The coordination of this flow is what kept the older-style enterprise groups functioning properly.

The vertical structure of the newer enterprise groups by contrast emphasizes cost reductions among member firms, especially in the areas of manufacturing and distribution. These groups more closely approximate the Western multidivisional corporation in the production and distribution are more closely coordinated and monitored within the same or closely-affiliated corporations. Nevertheless, Japanese enterprises prefer to grow by accretion, that is by adding new business units to an enterprise group, than by internalizing or by integrating new activities within a parent company.

Within a family of related enterprises in Japan, coordination or the planning of production appears to emphasize the matter of reciprocity or exchange between member firms, resulting in a type of control which is not so much financial as organizational. That is, membership in the group implies a kind of cooperation which is not based on financial considerations alone.

In the larger and necessarily more bureaucratic Western firm, by contrast, reciprocity between divisions of the same corporation is less emphasized because important decisions affection the divisions are make more often at the top of the corporate superstructure—at the level of general headquarters or perhaps even by the Board of Directors. At that level, complex matters of divisional reciprocity and competition are likely to be reduced to balance-sheet numbers. As a result, finan-

Table 3. Structural and Strategic Differences between American and Japanese Enterprises

American M-Form	Japanese G-Form				
internal coordination	external coordination				
integration within firm	affiliation between firms				
diversification of products	specialization of products				
multidivisional model of growth	enterprise network model of growth				
information hoarding within large corporations	information exchange between firms in network				
internal growth through R & D, technology, financial allocation	additive growth through networking, joint action, market sharing				

cial rather than organizational values are emphasized. Moreover, even at the divisional level, in negotiations between buyers and sellers (such as different departments in the same division, or different divisions in the same company), both sides bargain for their best deal but only one side is liable to realize much profit or money from the negotiation. This promotes competition and even distrust among divisions and it gnaws at the longterm health of the organization.

At the risk of oversimplifying what has been a long, complex, and prolix argument, I offer the following table of some of the major differences between the Western, multidivisional corporation and the Japanese enterprise attached to a major industrial group.

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