

Managing Global Competition: Japanese Companies in Transition*

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Abstract

Much has been written about the discontinuities taking place in the post industrial society (Galbraith (1967), Marcuse (1968), Bell (1973), Toffler (1980), Huber (1984), Reich (1991), Lewin and Stephens (1993), and Ilmitch, Lewin, and D'Aveni, (1998)) which are forcing multinational companies and heretofore primarily domestic companies in every country and in almost every business sector to re-examine their management philosophies, strategies and organization designs. In contrast to searching for a single theory of internationalization or for "the" theory of organizing for global competition, this paper focuses on the sources of variation as a way of understanding the firm specific paths of companies' internationalization and their organization forms. The paper extends the concept of equifinality (Katz and Kahn (1978), Doty, Glick, and Huber (1993), and Gresov and Drazin (1997)) for competing in global environment and as a basis for understanding why

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and how companies evolve unique configurations of strategies and organization forms. The paper applies this framework to a discussion of Japanese companies

1. Introduction

Much has been written about discontinuities taking place in our post-industrial society (Galbraith (1967), Marcuse (1968), Bell (1973), Toffler (1980), Huber (1984), Reich (1991), Lewin and Stephens (1993), and Ilinitch, Lewin, and D'Aveni (1998)), which are forcing multi-national and heretofore primarily domestic companies in almost every business sector to reexamine their management philosophies, and strategies and organization designs. These discontinuities, globalization of markets; an interdependent global economy; rapid changes in rules governing competition; increased pressures for time-based competition; demographic changes — aging of population in all developed countries, massive population movements, a declining educated and skilled work force in U.S., and emergence of technologically skilled work forces in less developed countries; demands of business to address extraeconomic goals; and demassification of the economy — the shift from mass markets to short-lived narrow specialized niches; all highlight the need for new business strategies and new forms of organizations appropriate for managing global competition

In addition, the shift from standardized to various new forms of flexible manufacturing has been enabled by quantum changes in technology, such as computer integrated manufacturing systems, computer-aided design and electronic data interchange. And revolutionary advances in computer-mediated communication technology — convergence of telecommunications, office automation, data processing and video technologies (Culnan and Marcus (1987), Huber (1990), Tessler (1991), and Fulk and DeSanctis, Forthcoming (1999)) — have given managers radical new options for designing and experimenting with new organization forms.

In the face of these shared discontinuities, a consensus is emerging among many scholars and popular business chroniclers about the requisite organizational capabilities of the new forms of organization (Hage (1988), Rose (1990), Dumaine

(1991), Lewin and Stephen (1993), and Volberda (1998)). The design of organizations that are flexible and adaptive, that can institutionalize receptivity to change and innovation, that are able to fully develop their human resources, that use technology in strategic and synergistic ways and that are global in scope, perhaps represent the most significant capabilities of the new forms.

A study (Droege (1994)) of organizational change episodes indicates that almost every multinational corporation in Germany, Japan and the U.S. is involved in some restructuring or reorganization in a quest to achieve organizational capabilities for managing global competition. The *Economist* (1994) reported that AT&T admitted to paying in 1993 about \$347 million to consultants for help in its global reorganization efforts. Similarly the Ford Motor Company is in the final phases of a bold plan — Ford 2000 — to transform itself into a “borderless” firm. While a company like Asea Brown Boveri (ABB) is held up as a prototypical model of the multicultural, transnational company with its unique matrix organization (Bartlett and Ghoshal (1993)), other companies such as Dow Chemical and Citibank are, at the same time, dematrixing their organizations for simpler regionally centered or worldwide product structures.

Historically management gurus and many scholars have sought to identify “the” organizational solution for designing and managing the multicultural, multinational corporation. The articulation of organizational configurations such as transnational organization (Bartlett and Ghoshal (1988)), heterarchy (Hedlund (1986), Hedlund and Rolander (1990)), perpetual matrix (Bartlett and Ghoshal (1989)), borderless corporation (e.g. Business Week (1994)), network organization (Nolan (1988), Miles and Snow (1986, 1992)) and various theories of internationalization (for a review, see Meln (1992)) have served to draw attention to the contradiction of designing and managing organizations that are in the words of Percy Barnevik simultaneously “global and local, big and small, decentralized with centralized reporting” (Taylor (1991), ABB (1991))

It is clear that no single dominant organization form has emerged as prototypical of the one best way to design and manage the multicultural, transnational firm (cf. Doz and

Prahalad (1991)). If anything it is possible to identify in almost every industry effective, vigorous, intensely competitive firms executing strategies and organization designs idiosyncratic to them. Examples include Unilever, Procter & Gamble, ABB, Siemens and Toshiba. It is also clear that strategies, however unique, can only succeed within the limits enabled and restricted by the organization history of strategic and organization adaptations (Lewin, Long, and Carroll (1998)).

Thus, it seems to us that focusing on explaining sources of variation in organizational configurations will contribute to understanding of why organizations develop distinct capabilities. In this paper, we extend the concept of equifinality (Katz and Kahn (1978), Doty, Glick, and Huber (1993), and Gresov and Drazin (1997)) in the context of the evolving globalization of organizations by examining the transition of Japanese companies to managing global competition. Simply put, equifinality is the premise that multiple strategies and/or organizational forms are equally effective in the same competitive environment (Katz and Kahn (1978), Doty, Glick, and Huber (1993), and Gresov and Drazin (1997)).

2. The Many Paths to Internationalization

A review of the internationalization literature suggests that many factors underlie the variations in why and how companies internationalize. These sources of variation have their origin in the firm's competitive environment and managerial cognition of that environment, country form of capitalism, firm history of strategic and historical adaptations and strategic intent.

Figure 1 illustrates our conception of a firm's global organization configuration, at a point in time, as an idiosyncratic culmination of many factors. It is intended to portray the complexity and path dependency of the process of evolving a global organization configuration.

Factors in the external environment include the firm's cognition — interpretation — of its competitive dynamics, political forces such as international trade pressures (the case of Japan), and country form of capitalism reflecting its history, unique cultural dimensions, role of government in the economy

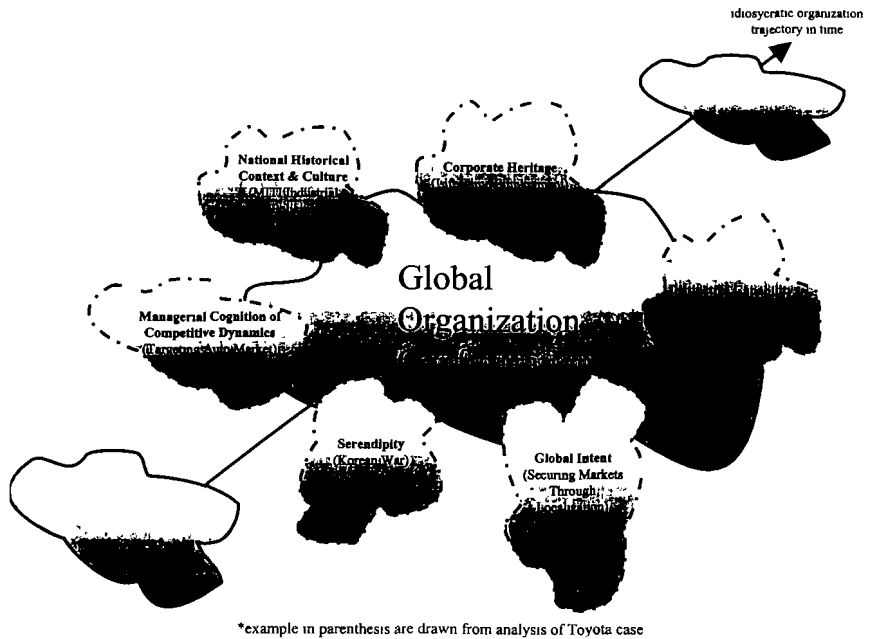


Figure 1. The Dynamics of Idiosyncratic Evolution of Global Organization Form

and the structure of capital markets (Lewin, Long, and Carroll (1998)). For example, the tacit and explicit knowledge of British international trade was largely shaped by the structure of the British Empire and the role of the colonies as sources of raw materials and as captive markets for the products of British industry. Following World War II and the dissolution of the empire, British industry had to contend with two major forces: the internal politics of successive cycles of nationalization and privatization and the need to adapt to a new constellation of global competitors. Similarly, the internationalization of Japan dates back to the Meiji period and to the opening up of Japan to the Western influence advocated by such men as Fukuzawa Yukichi (the founder of Keio University) and Shibusawa Eiichi (the founder of Hitotsubashi University). However, up to World War II Japan was primarily importing machinery from the West and cotton from China and India, and exporting textiles, like silk, and food products like rice. Trading companies accounted for most of this trade (Kawabe (1982), Yoshino and Lifson

(1986)). As we discuss in a later section, the existence of these trading companies was very important to the export trade of Japan after World War II.

Factors in the internal environment include the company history of strategic and organization adaptations, administrative heritage, distinctive capabilities, and the strategy and organization design in place.

Strategic intent captures the particularistic outcomes of the ongoing interaction of managerial cognition of the firm's competitive dynamics, of the role of shared understandings, and of the formulation and/or emergence of strategic direction. The choice of specific strategies may be partially a function of one or more factors.

The decision to enter new geographic markets may be a result of competitive dynamics such as an exchange of threat (Graham (1974, 1978)), following the leader (Knickerbocker (1973)), intense domestic competition and/or small or medium domestic market share (Hennart and Park (1994)); and/or it may be due to a top management vision of the shape of the emerging competition (Hamel and Prahalad (1994)). An export strategy may result from a national industrial policy, the need to exploit economies of scale, a small domestic market (e.g. SKF) and/or the maturing of the product life cycle (Vernon (1966)). In other cases, exports may be triggered by existing similarity in market demand due to geographical proximity — "psychic distance" (Johanson and Vahlne (1977)). Locating production facilities in other countries may result from a desire to benefit from "cheap hands," "quickest brains," or the need to loosen the constraints of a small domestic market, currency appreciation (high yen), and/or a need to respond to trade pressures and be perceived as a local employer, or to gain political goodwill or fiscal concessions. A diversification strategy or the formation of alliances may result from several factors such as national industrial (technology) policy, company history (e.g. Corning, see Bartlett (1990)), small domestic market, intense domestic competition, and/or the need to achieve economies of scope (e.g. Canon), or a need to shift the business focus from a maturing industry to a growth industry (e.g. Hoffman-la Roche has recently purchased Genentech and Syntex in the U.S. to expand into biotechnology). Technology acquisition strategy may result

from the needs to (a) balance lack of distinctive competence, (b) compensate for shortage in scientific and engineering specialists, (c) diversify scientific bases, and/or from (d) a need to respond to political pressure.

In this paper we are emphasizing the antecedent and managerial choice variables which can affect the configuration of strategy and organization form. However, managerial discretion, top management turnover, trial and error processes and serendipity operate as control variables and must also be viewed as potentially important sources of variations, which culminate in particularistic organization configuration. Strategic choices to leapfrog or imitate competitors can be outcomes of managerial discretion. Similarly trial and error processes, learning from samples of one or less (March, Sproull, Tamuz (1991)) and serendipity can be important in understanding emergent strategies. The many possible paths that firms can follow towards developing particularistic organization configurations are illustrated in Figure 2.

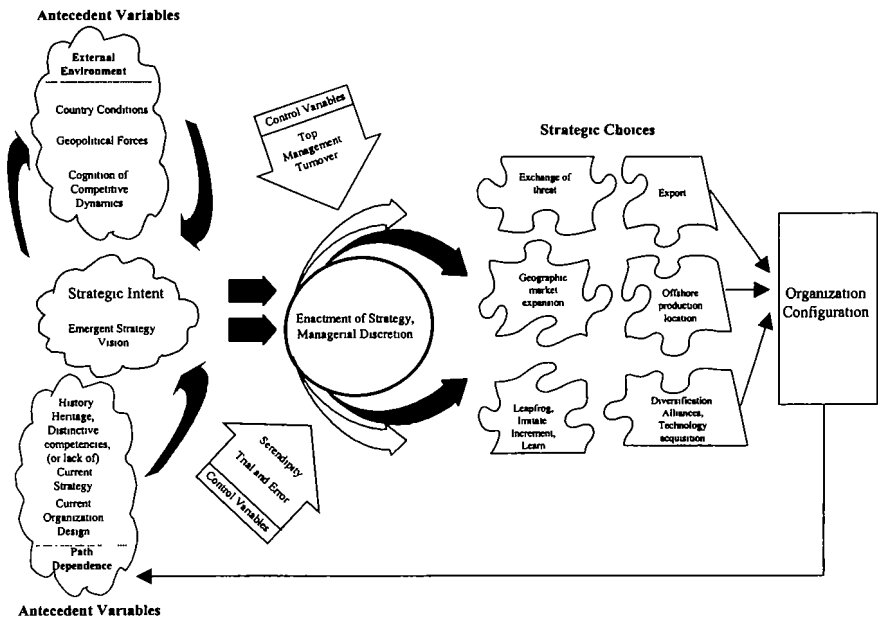


Figure 2. The Many Paths to Internationalization

3. The Early Internationalization of Japan

Following World War II, Japan's imperative was to stabilize its society, rebuild wealth for the total society, re-generate a high standard of living, and rebuild a strong industrial base which could support the development of other industries and maintain Japan's economic independence. Guided by MITI, Japan first concentrated on rebuilding basic industries in electricity, steel, chemicals, and cement.

Government policies initially focused on (a) high added value products which used relatively few imported materials, (b) manufacturers that could export their products as a means of financing import of essential raw materials and energy, (c) promoting intense competition in the market place while shielding companies from external competition to allow nascent internal markets to develop, (d) importing technology and driving costs lower by continuously enhancing these technologies, and (e) developing social policies supporting a low cost capital strategy such as encouragement of personal savings, limited social security programs, limited national defense, low inflation, and long-term oriented patient capital structure (cf. World Bank (1993)).

These policies were mutually reinforcing. Forcing companies to compete vigorously promotes "competing" attitudes and hones managerial skills and organizational capabilities, which thrive on winning (cf. Parkinson and Amikura (1994)). A patient capital structure with banks taking equity-like positions and extensive crossholding of shares between companies in a group, contribute to a long-term orientation and to a preference for long-term investments and building market share. Limited social security obligations encourage personal savings and low cost of capital. Keeping government costs low, mostly through lower social welfare costs and limited defense efforts, reduces the tax burden and lowers government financing needs, thus increasing the pool of capital for investment and reducing the cost of capital. Virtual life time employment increases willingness of companies to invest in human capital which contributes to continuous improvement and higher manufacturing

productivity

In summary, Japan's situation after World War II and the implementation of social and economic reconstruction policies shaped the early emphasis on exports. It also created an intense domestic culture of competition. Being removed from world markets, Japan emphasized relatively standardized products at high quality and low cost as a means of penetrating world markets, in particular, consumer electronics, automobiles, office equipment, electronic components, and industrial machinery.

In the initial stages of building export markets, Japanese trading companies provided the crucial knowledge of international trade (Kawabe (1982), Yoshino and Lifson (1986)). Japanese companies were able to focus on product design and manufacturing relying on the trading companies to be the knowledge link to the market and to bear the risk of international trade. Although their role is changing, Japanese trading companies continue to have an important role in facilitating and structuring Japanese global trading transactions.

As a result, the initial thrust of internationalization by Japanese companies was built on an export strategy. The oil shocks of 1970 and 1974 intensified the national priority on exports (to pay for the dramatic price escalation of oil) and also triggered a drive for quantum leaps in industrial efficiency primarily to conserve energy. The Plaza Accord in 1985 and the continual rapid appreciation of the yen, and trade frictions with the U.S and Europe gave impetus to the establishment of manufacturing facilities abroad. Even though Japan accounted for 9.4% of world exports in 1988 (Itami (1994)), the Japanese economy is much less dependent on exports than, for example, Germany (9.4% of GNP compared to 26.8%). However, the concentration of these exports in the machinery and consumer electronics industries reflects the national policies, which guided the development of the internationalization of Japan. Whereas the average percentage of sales exported by Japanese companies in 1988 was 20.9%, the machinery industry accounted for 78% of manufacturing exports (Itami (1994)). This suggests that companies in industries such as automobile manufacturing (including parts suppliers), consumer electronics, business equipment, and heavy engineering were leading the way in

Japan's internationalization. It might be noted that manufactured products constitute over 95% of Japan exports overall, whereas in the U.S. it is around 75% and in the U.K. about 80% (World Competitiveness Report (1993)).

4. Japan Globalization Strategies

The global intent of Japanese companies has shifted from developing basic manufacturing capabilities emphasizing volume after World War II to emphasizing quality in the 70s and 80s. In the late 80s and early 90s, the dominant logic driving global operations has been investing in offshore production facilities in which strong manufacturing systems and skills have been replicated abroad in a centralized hub form. Towards the mid-90s knowledge acquisition, in particular, has emerged as a global intent in companies seeking to develop innovative R&D capability.

In the following, we describe four globalization strategies found in the companies given as examples. These strategies evolve around localization configurations that are idiosyncratic to the particular companies mentioned, yet they are outcomes of organizational evolutions over time. Rarely have the companies succeeded in leapfrogging the competition by a novel configuration. The notoriously poor record of Japanese companies in acquisitions is a case in point.

5. Localization Strategy

Localization refers to Japanese direct investment strategies in overseas production facilities to counter trade barriers, secure existing markets, cope with high production costs in Japan, and be perceived as local producer (Chang (1995)). In contrast to the practice of U.S. companies which establish offshore manufacturing plants primarily for the purpose of manufacturing abroad and importing to the U.S., Japanese localization strategy is designed to serve the market within which the manufacturing takes place (Johansson and Yip (1994)). With the exception of consumer electronics, very few

products manufactured offshore are imported back to Japan. This trend might change, however, as the 90s draw to a close. Although in 1988 Japan's ratio of overseas to domestic production was about 5% (compared to 20% for Germany), it is important to recognize that the shift to localization occurred in response to trade friction and the rapid appreciation of the yen after the Plaza Accord. The shift also served to secure local markets first captured through exports.

To execute localization strategy, Japanese companies chose to replicate their successful forms of organization and management practices (in particular manufacturing) in the host countries. The automobile industry probably represents the most elaborate example. In 1982, Honda was the first Japanese automobile manufacturer to establish an assembly operation in the U.S. in Marysville, Ohio. Other manufacturers followed, Nissan in Smyrna, Tennessee; Toyota in Georgetown, Kentucky; Mazda in Flat Rock, Michigan. Fuji Heavy Industries established Subaru-Isuzu a joint venture in Lafayette, Indiana, and Mitsubishi formed a joint production venture with Chrysler near Bloomington and Normal, Illinois. Replicating the production system for automobiles in a host country requires the transfer of the many production stages. In the case of Japanese auto manufacturers, it involved replicating the parts supplier system in the U.S. and establishing the many support systems at the final production and assembly locations. In the case of Toyota, the factory in Kentucky replicates the Toyota manufacturing system, supported by a supplier network (primarily Japanese suppliers affiliated with Toyota in Japan but also many U.S. parts makers) and a design and engineering center in California with the mission of designing cars for the U.S. market.

Toyota provides a leading example of how localization might proceed in a host country. Toyota U.S. is intended to become self-sufficient in its ability to design and produce for the U.S. market. However, certain specialized capabilities such as engine research, engineering, and manufacturing systems remain centered in Japan. At the same time, Toyota U.S. is integrated with Japan in various symbiotic ways. The NUMMI joint venture with GM in Fremont, California served as the "test tube baby" case for Toyota localization strategy in the U.S. The Tawara "mother" plant was the source of manufacturing and

management know-how implemented at NUMMI. When the Toyota factory in Georgetown, Kentucky was built Tawara and Fremont (NUMMI) served as the "mother" factories. However, once the factory was operational, it became part of the Toyota network of "sister" factories which continually exchange, share, and adopt one another's manufacturing innovations.

At Honda, the replication of the production system did not involve as tight a symbiotic relationship as at Toyota. The Marrysville, Ohio factory developed various indigenous manufacturing practices and innovations, which were not shared with Honda factories in Japan. These indigenous adaptations to the manufacturing process became a manufacturability issue when Honda was planning the new Accord. Manufacturing teams from Ohio had to become involved in the design of the manufacturing process because the variations, which had developed in Ohio, had not been shared with other plants (Business Week (1993)).

The success of Japanese auto manufacturers in replicating their manufacturing system and supplier networks in the U.S. demonstrates the importance of building on idiosyncratic organizational capabilities. What Honda, Nissan and Toyota set out to do was to replicate their core organizational capabilities and processes while also making adaptations to accommodate certain statutes (OSHA, EEO, Environmental Protection) and human resource management practices (Ishida (1986)). All else equal, firms can be expected to want to replicate, in a host country, the organization forms and practices which are the basis of their competitive advantage. In the case of Japan, it is clear that on balance, replication has been the dominant approach to implementing localization in host countries with a centralized hub organizational configuration. The similarities in systems and practices between Japan and host country operations are far greater than the differences. Yet, the companies will vary in their approach to localization as illustrated by the comparison of Toyota and Nissan in Table 1.

6. Alliance Strategy

Burton and Saelens (1994:67) conclude that Japanese firms

Table 1. Comparison of Globalization Strategy of Two Japanese Automotive Companies 1992

	Toyota	Nissan
Total	4,895,000	3,015,000
Production Volume		
—produced overseas ('92)	700,000	600,000
Plants Overseas	Brazil, Canada, India, Philippines, South Africa, Thailand, U.K. and U S	Mexico, Spain, U.K and U S
Plants in U S	TMM (Kentucky)	NMMC (Tennessee)
—Founded	1988 (1984 NUMMI)	1983
—Capacity	400,000	450,000
—Product	Camry	Centra
Number of Employees	3,500	5,000
Japanese	200	25
President	Japanese	American (From Ford)
Mother Factory (Source of Local Knowledge)	Tawara and NUMMI (Fremont)	Atsugi (initial training ground of Tennessee Workers)
Knowledge Transfer	Tightly linked Tawara ⇒ TMM and ↑ NUMMI	Loosely linked
Car Design Center R&D	Planned for 96	N A.
Localization Policy	Toyota-ization (Transplant Toyota's knowledge as much as possible)	Localization (Utilize local competencies and knowledge)

have historically focused their alliances on “exporting products and importing technology,” policies that were supported by the industrial history of Japan. Increasingly, however, there are calls for strategic collaboration that “evolve as living systems” (Kanter (1994: 97)) and focus on creating value and knowledge together (Teramoto et al. (1994)). The notion of a joint venture as an exchange of resources and skills limited to a contractual obligation (e.g. Hamel, Doz, and Prahalad (1989)) is giving way to strategic collaboration nurtured as a relationship between two partners (Kanter (1994)) Such relationship maintenance has long been a core capability of Japanese companies, which generally give higher priority to alliances than their Western counterparts (Burton and Saelens (1994)). Japanese companies

are also noted for having a higher learning capability in the collaborative relationship (Teramoto et al. (1994)), and thus tend to benefit more from the alliance through learning than their Western partners (Hamel (1991)). There are, nevertheless, differences between the alliance strategies and capabilities of Japanese companies. NEC, for example, has only recently intensified its involvement. In 1989, NEC entered into an alliance with MIPS Computer Systems to acquire RISC-technology, and in 1990 it made a wide-ranging agreement with AT&T in semiconductors (Teramoto et al. (1994)).

Toshiba provides an example of an alliance as a global collaborative strategy. Toshiba has a history of cooperation dating back to early 1900 and its partnership with General Electric. Beginning in the 1990s, Toshiba envisioned a future based increasingly on a network of strategic collaboration agreements. These include Motorola on semiconductors, Siemens on joint second sourcing agreements, IBM on color flat-panel displays, Apple on multimedia, Samsung on flash memory chips, and Time Warner on entertainment to mention but a few partners worldwide. The rationale for the alliance strategy, according to President Fumio Sato, is technological complexity and diversity of world markets. "It is no longer an era in which a single company can dominate any technology or business by itself...you simply can't expect to be best at the whole process any longer" (Fortune (1993: 44)). Furthermore, the product development costs are so high that no single company may be able to fund research — the next generation DRAM memory chip, for example, is expected to cost more than \$1 billion to develop. Today most companies are forced to cooperate on particular technologies in which they lack competence or resources (Kanter (1994), Hamel, Doz and Prahalad (1989)). Toshiba has long developed and nurtured alliances as a strategic capability and does not consider them as a last resort.

Another example of the alliance strategy is Canon. Long perceived as pursuing market dominance as a sole objective, Canon now seeks to shift its strategy towards a more harmonious state of cooperation/competition that is called symbiosis. "Symbiosis with global partners" is partly a response to increasing trade friction threatening the export markets of Japanese products (cf. Teramoro et al. (1994)). More than a

traditional joint venture, symbiotic alliances aim at technology and product development linked to corporate strategic objectives shared by both partners (Banks and Baranson (1993)). Such alliances increase mutual global dependency of major competitors and test their ability to cooperate in some areas while competing in others (Hamel and Prahalad (1994)).

7. Acquisition Strategy

Some of the more ballyhooed acquisitions in the 1980's included Sony's takeover of Columbia Pictures, followed by Matsushita's \$6.1 billion takeover of MCA in the 1990. These acquisitions were seen as "natural extensions of ... long-term goals of linking media software development with the hardware needed for everyday personal use" (Odaka (1991)). Sony has since attempted to restructure while suffering from heavy losses attributed to Sony Pictures Entertainment (Economist, Nov. 19 (1994)). Matsushita failed to cope with the demands for more autonomy by the MCA management (Grover (1994)) who resented Osaka for rejecting further acquisition proposals in the entertainment industry (Yamakawa, Otaki, Anzai (1995)). The hoped for synergies have thus failed to materialize although Sony is still persisting in developing its audio-visual competitive position.

These two acquisitions represent attempts to leapfrog the acquisition of an organizational capability which the acquiring company is lagging or missing such as software. Such acquisitions are difficult to integrate partly due to the different cultures embedded in the manufacturing of hardware and in the management of creative talent, of films, and of software design. In addition, diversification into a radically different kind of industry is challenging even without the problems of integrating two diverse corporate cultures.

Another example of the acquisition strategy is Fujitsu's takeover of ICL in 1990. As ICL was relatively dependent on Fujitsu chips and components in its manufacturing, it can be seen as an extension to the previous technological cooperation between the two companies, giving Fujitsu a lead in the takeover. While some question the benefits of the acquisition to

Fujitsu, it seems to represent an attempt to leapfrog into the European market (Management Today (1992)). By using ICL's marketing and manufacturing strength in Europe, Fujitsu may have also aspired to mount a challenge to Hitachi and NEC in the European markets (Smith and Major (1990)). Because of political pressures, Fujitsu has managed the acquisition at arms-length, allowing ICL to retain its independence and assuring its long-term survival. ICL continues to be run by its UK executives, with only two Japanese managers residing in London (Economist, Apr. 10 (1993)). At the same time, the two companies cooperate outside the UK and Japan. This has allowed Fujitsu to earn political goodwill in the U.K. as it has helped to substantiate the continuing ICL autonomy. Although Fujitsu may see ICL as a part of its emerging global federation of companies, the local integrated capability of Fujitsu/ICL may emerge very incrementally.

A third acquisition example is the \$2.6 billion takeover of Firestone by Bridgestone in 1988. This acquisition was most likely motivated by the dynamics of the worldwide tire industry which was undergoing consolidation to achieve economies of scale in markets and production. Firestone may have acknowledged its incapacity to compete in global tire markets and approached Bridgestone for the bid (Nevin (1989)). Bridgestone may have further decided to acquire Firestone to better serve Japanese auto makers abroad (Economist, Sept. 7 (1991)). However, Bridgestone was forced to upgrade the manufacturing capabilities of Firestone (Kerr (1992), Financial Times, May 17 (1991)). Not surprisingly, Bridgestone, a winner of the Deming award, replicated its organizational and manufacturing core capabilities in Firestone, bringing in a Japanese CEO, Yoichiro Kaizaki. As Bridgestone/Firestone Inc. suffered a loss of \$358 million, bringing the parents' earnings down with 53% in 1990 (Halden (1991)), there are concerns that Bridgestone paid too much and moved too slowly to integrate the acquisition.

As these acquisition examples illustrate, the competitive dynamics that motivated each acquisition differed. Sony and Matsushita pursued a capability unrelated to their traditional core business but viewed strategic by the top management. Matsushita, however, may have partly been driven to buy MCA

as an imitative move, seeking to neutralize any competitive advantage that Sony might have gained by its first-mover acquisition of Columbia Pictures. Matsushita's willingness to sell majority to Seagram supports this view as in retrospect the consumer electronics giant's entry into Hollywood appears a costly mistake.

The Fujitsu/ICL example serves to point to an acquisition strategy to build a global federation of relatively independent companies, motivated by political sensitivity of strategic acquisitions. This type of global strategy pursues cooperation and autonomy among the units in third countries, yet may later emerge towards a more unified competitive front. Bridgestone/Firestone is an example of a replication strategy implemented through an acquisition and motivated by aspirations for a wider global market position. What all these examples suggest, however, is that an acquisition strategy has been a very costly and uncertain form of globalization, perhaps one in which the Japanese companies have been at their weakest as globalizers. It is not due to a lack of strategic ends pursued, but rather due to the difficulty encountered in their implementation.

8. R&D Strategy

U.S. and European companies have long acknowledged the benefits of doing R&D for a particular market place locally (Johnstone (1992)). In recent years, there has been a marked increase in locating engineering design centers and R&D laboratories outside of Japan. For example, Japanese R&D expenditures in the U.S. increased almost tenfold between 1983 and 1990 (MITI (1991)). The strategic rationale for localizing research and development overseas involve (a) technical capability to satisfy local market (e.g. the Toyota design center in California), (b) proximity to local science bases, (c) increasing diversity of research perspectives to compensate for creativity of Japanese researchers, (d) countering shortage of engineering and science specialists in Japan, and (e) responding to political pressures. With a few exceptions (e.g. Toyota in the U.S., Nissan in the U.K.), the R&D centers of Japanese companies were not established to support existing production or marketing

activities. The great majority of R&D centers overseas are involved in basic research to support core technologies back in Japan.

The overseas R&D strategies of Japanese companies involve three basic approaches — affiliated research centers, stand-alone research centers, and contract research. Similar to a research strategy employed by pharmaceutical companies in the U.S., Japanese companies have established research centers affiliated with universities (e.g. Aisin Seiki U.K. Research Laboratory at the University of Sussex, Hitachi Cambridge Laboratory). However, this strategy has been most preferred by pharmaceutical companies such as Yamanouchi and Eisai. Also prevalent are stand alone centers such as the Nissan European Technology Center at Cranfield, Kobe Steel Research at Research Triangle Park in North Carolina, and the Canon Research Europe in Guildford, U.K.

All in all in 1989 Japanese companies had 188 research centers (MITI (1992)). Japanese multinational corporations have thus embarked on the globalization of R&D, partly in search for innovation as a competitive advantage (Papanastassiou and Pearce (1994)). By hiring foreign researchers, these companies seek basic research skills and innovative mindsets (Swinbanks (1993)). Yet the management of foreign researchers is still problematic (Bloom (1990), Cairncross (1994)).

9. Conclusion

We have argued that Japan, in response to a new constellation of factors in its external environment—trade frictions, yen appreciation, demassification of markets, high domestic manufacturing costs, maturing product life cycles—is moving away from exports as its primary form of participation in international trade. Japan's approach to managing global competition in the 1990's and beyond involves a focus on globalization strategies—localization, alliances, acquisition, and globalizing upstream capabilities.

Localization involves replicating, in host countries, organization capabilities which have been the source of Japanese competitive advantage in the past. Localization has

been a very successful strategy for Japanese companies especially where the objective is to secure markets, achieve local responsiveness and diffuse trade friction. In such industries as automobiles, consumer electronics, and office equipment the Japanese management approach has been successfully implemented in host countries.

The Japanese have made adjustments to accommodate different employment statutes and other cultural differences. However, the more the replication adheres to capabilities honed back home the more coherent and successful the operation overseas (e.g. Toyota and Nissan in the U.S.).

The formation of alliances is another globalization strategy which is well-suited to Japanese management style. Alliances are seen as useful for establishing symbiotic relationships with potential global partners (e.g. Canon with Apple and Hewlett-Packard). The alliances are a means to acquiring or leveraging capabilities in technology, product development, market access and/or distribution. The Japanese have had much success domestically with various forms of alliances and more recently with partners (and often competitors) abroad. Their success is due, to a great extent, to a preference for evolving long-term relationships. We therefore expect an increase in Japanese alliance activity.

Unlike in the U.S., mergers and acquisitions by Japanese companies of foreign companies have been rare. In the case of Sony and Matsushita, the purpose was to leapfrog the acquisition of markets and core competencies (e.g. film making, multimedia software design) which the two firms were totally lacking. However mergers and acquisitions in general are difficult to integrate because of divergent administrative heritage and embedded different cultures (Economist, Sept. 10 (1994)). Integrating acquired companies has proved even more difficult for Japanese companies. Sony has been forced to adopt a regional autonomy approach for its Columbia Pictures and CBS record divisions in the U.S. In our view, acquisitions of foreign companies are not likely to become a major feature of Japanese globalization strategies.

Upstream globalization of research and development capabilities seems to address a major need of Japanese companies for diversifying and acquiring basic science and

technology capabilities in such industries as pharmaceuticals, biotechnology and telecommunications. However, the management of integrated research networks represents a major challenge for Japanese companies, and it remains to be seen how successful this strategy will prove to be. Eisai provides one very successful example of upstream globalization of research and development.

Because strategies can only succeed within the limits of the organization design, it is our conclusion that Japanese companies will prefer localization and alliance strategies which are based on well-honed organization capabilities over mergers and acquisitions. However, because Japanese companies recognize the imperative of diversifying and acquiring science and technology capabilities in many fields, we expect increased experimentation with various forms of global research and development networks. In addition, we expect greater effort at internationalizing the research staffs of domestic research and development centers by recruitment of world class scientists and engineers to work in Japan.

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