ABSTRACT

This paper examines whether Japanese manufacturing MNCs' FDI is driven by motivations similar to those hypothesized for US and Europeans such as higher returns or profit extension for new products and technologies. But these do not explain several large Japanese investments and acquisitions. A framework emphasizing corporate routines based on administrative heritage and especially experience with product cycles and continuous cost improvements provides better insights into their pattern of FDI and its strategic role. Particularly, foreign investments are used at a cycle's beginning to access new technologies for sale and development in Japan and at its end to preserve or improve market position when Japanese exports are not competitive. Thus, FDI is part of their strategy to manage this evolution.

INTRODUCTION

This article examines Japanese multinational manufacturing firms' foreign direct investment (FDI) in the context of industry and product life cycles in conjunction with these firms' apparent motivation to retain or expand global market share throughout the evolutionary cycle. The intent is to understand these factors' influence on Japanese MNCs in terms of their cross border production investments. The paper will particularly address some large recent acquisitions and investments that do not fit explanations such as profit extension or internal synergism that are often used to explain FDI by Western MNCs (e.g. Dunning 1984, 1991, and Porter 1989). Rather, the analysis builds on material presented by the author and others on Japanese MNC decision-making as an evolutionary rule based system and process reflecting Japanese managers interactive experience in the postwar with product cycles, constant cost declines, and growth in global market share (Abegglen and Stalk 1985, Baba 1989, and Rapp 1992). It thus agrees with similar analyses presented for multinational corporations generally by analysts such as Bartlett and Ghoshal (1989), Kogut (1992), Mitchell, Shaver and Yeung (1992), and Kogut and Zander (1992) which support the application of Nelson and Winter's theory of evolutionary change (1982) to MNCs. For the purposes of this analysis, the author does not address the activities of large service organizations such as banks and trading companies but only considers manufacturing firms. Further, only those with overseas operations are viewed as multinational, and large firms with overseas sales via a trading company or as a parts supplier are excluded.

The presentation analyzes the proposition that Japanese manufacturing MNCs' foreign direct investment (FDI) reflects their administrative heritage and more particularly that their strategic behavior, including the role of FDI, is a logical competitive consequence of the interaction of product cycles, lower cost expectations based on continuous improvement, and a firm's evolutionary development. This approach is used because these factors appear important to Japanese postwar managers based on their competitive experiences compared to Western firms (Rapp 1992) and seems to offer a better explanation of their pattern of overseas investments.

Japanese MNCs' foreign direct investment has developed quickly over the last fifteen years and especially the last five, and has been subject to considerable analysis (e.g. Komiya 1987, Okumura 1989, and Komiya and Wakasugi 1991). While the speed reflects Japan's rapid economic and competitive evolution since the War, the analyses draw largely on models describing Western and especially US MNCs. This has been convenient because Japanese firms appear to have followed development patterns similar to Western firms. Once the domestic market became saturated, they began to export, and having established an international presence, began to invest to service customers better, hedge exchange risks, and extend sales opportunities. However, more detailed analyses indicate that though the timing in the corporate growth pattern is analogous, the motivations and competitive implications are often different, just as Japan's growth and the factors supporting it have differed from the US or Europe.

For example, SONY's acquisition of CBS records and Columbia Pictures was driven by their earlier experience with Betamax where the system was ultimately rejected in favor of VHS because of insufficient software support. They could not afford another Betamax experience repeated in 1 3/4" CD or in 8mm video. Purchasing major software producers with extensive libraries and cross licensing arrangements avoided this. Then Matsushita responded with their acquisition of MCA and Toshiba with their tie-up with Time-Warner since they could not risk SONY achieving an advantage in the market they could not match. Some reasons for this competitive compulsion will be analyzed below but have been covered in more detail elsewhere (Ohmoe 1991 and Rapp 1992 and 1992A).

From these types of situations, it can be appreciated that Japanese multinationals' competitive routines with respect to foreign direct investment are heavily influenced by Japanese competition as it has evolved from the import substitution stage through foreign direct investment even
perceive as the source of their competitive success. The routines we have seen applied to foreign direct investment are consistent with this administrative heritage in terms of the current economic environment.

This is because the successful imitation and cost reduction routines have had a strong inertia. As part of this set, exports and foreign markets were seen as keys to long term corporate survival. Indeed, manufacturers who were not successful exporters in those industries did not survive. However, these routines had to be adjusted, but were not scrapped, to deal with the new situation emerging from Japanese export success. That is, when the yen appreciated and the VRAs emerged in the 1980s, large Japanese manufacturing exporters, particularly car, machinery, and electronics manufacturers, finally really considered FDI and the adjustment in their routines. Their first reaction, though, was to absorb most of the cost increases and to continue exporting to preserve market share (Marston 1990). They then began developing the offshore sourcing or production facilities in the advanced countries and in the NICs and LDCs, depending on the product and industry. They thus responded to product cycle developments in advanced markets where there were political pressures and in the NICs and LDCs, where there were cost advantages.

However, another decision factor reflecting the continuation of their administrative heritage was also in evidence even as they invested into new manufacturing locations abroad. Once one firm invested, almost all competitors followed. Though Toyota's foreign investment might be viewed as reducing the risk of foreign assembly for Mitsubishi, a more important motivation seems to be the "competitive compulsion" described above (Ohmae 1991). That is, Toyota's successful investment will hurt Mitsubishi because Toyota will increase global market share, which will improve their cost position. More imported parts may lower costs due to production effects or may spread the development cost of a new model over more units. Further, eventual exports from the US could make them a stronger cost competitor. Finally, Mitsubishi faces the same VRA and Yen appreciation as Toyota, which requires some managerial response. Since overseas investments is a logical possibility to reduce costs and be competitive, why not follow since this traditionally involves little risk for managers making this decision. Alternatively, failure to invest represents the unknown and could be quite risky if Toyota is exceptionally successful.

Given the various routines and experiences examined the histories of each firm and industry, one can see there are multiple forces shaping and stimulating foreign investment that vary by industry and firm but have little to do with profit extension or rate of return on capital. In steel, for example, the product cycle had reached the point in the mid 1980s where Korean steel was being imported into Japan and Japanese producers' competitive position abroad was being eroded. This was an especially critical concern in the U.S. where their automobile clients were moving production. Machinery manufacturers were experiencing similar effects in autos and electronics. Therefore, both groups felt compelled to invest in the U.S.

While machinery producers like parts manufacturers could build new plants fairly easily, steel companies had difficulties given environmental regulations combined with the time and cost necessary to build a greenfields operation. Japanese tire and chemical companies faced similar situations. Thus, acquisitions (partial or total) or strategic alliances were the required. (See Japan Steel Information Center 1991 for outline of several such ventures.) Such investment involved substantial capital starting with the acquisition price but were followed by more modern equipment and reorganization of the US companies' various operational and technical routines. However, they were made with profit considerations seemingly secondary especially given that the major US and European blast furnace producers were actually reducing capacity during this period. Even companies like Armco who had been technological innovators entered into arrangements with Kawasaki and Nippon Steel because they no longer had the capital to modernize or the technical leadership in production processes, partly due to disastrous diversification into other businesses stemming from dissatisfaction with low returns in steel.

The Japanese producers' primary motivation was to serve their Japanese automobile clients who were shifting production to the US. However, competitive compulsion had its role. There was a concern if they did not satisfy a client's US needs, a Japanese competitor might. Having created a satisfied customer, the competitor could use that to access the client more generally. This could occur because the permanent employment system combined with constant job rotation means everyone knows each other. The man buying steel sheet in the US may have been or may become the buyer for sheet in Toyota City. In any case, he knows the buyer in Japan. They may be friends or from the same school. With a proper introduction, a good marketing man can develop a relationship leading to orders, especially if the product has been used successfully in a company's US cars. (The Japanese did something similar to US steel producers who could not supply in the 1950s and 60s due to strikes.)

The coordination and continuity of Japan's corporate networks exposes firms to this competitive risk. Therefore, Japanese firms will defend against this, even offering products and services at a loss to control a client relationship, though making every attempt to minimize the cost. Another example of such a strategy driving foreign investment that might be considered uneconomic from a US cost of capital or profitability viewpoint is Bridgestone's acquisition of Firestone. Investment bankers felt they overpaid for the acquisition and have noted that at least another $1 billion has been required to modernize the company. Yet, from Bridgestone's viewpoint the road was clear. Production of two million cars was shifting to North America from Japan, where they had the dominant market share in tires. Their rivals had developed various US alliances. Bridgestone could not build due to pollution regulations. The combination of competitive compulsion and client control meant they
To appreciate all the reasons for and motivations behind this situation it is not necessary to review Japan's postwar economic performance. However, it is important to recognize the role classic product cycles within its industrial development and to appreciate FDI's position within those cycles. That is, historically, Japanese industries and firms have for the most part been followers and imitators. Japan first produced and exported simple manufactures and primary commodities such as copper and raw silk. Then growth and development improved technical production capabilities and generated demand for more advanced products, initially cotton textiles but then machinery, steel, shipbuilding, automobiles, ICs, computers, etc. Since more advanced industries were often more capital intensive, growth and capital accumulation shifted the factors of production in the appropriate direction as part of overall economic development. Yet, they were lagging these same developments in countries like the U.S., U.K., or Germany. This interindustry product cycle evolution is well-documented (Akamatsu 1962, Vernon 1966, and Rapp 1967).

FDI'S PLACE IN THE PRODUCT CYCLE

In this pattern of industrial evolution, products were first imported from more advanced countries where they were developed. When domestic demand developed further, the Japanese government protected the industry. It grew and began to export as the local market was saturated (Porter 1989) and producers became more efficient. Japan was assisted in this process because firms in more advanced countries simultaneously became less competitive in such follower industries as their economies grew, capital increased and wages rose. They were also moving into more advanced industries and products for which there was demand, for which they had the production factors, and which justified higher wages. Since their industries were usually more sophisticated technically and capital intensive, their economies were innovating and creating the demand, technology, and the capital required to competitively develop these higher value added industries.

Once the new technology was known, though, the cost of transfer declined, aiding followers like Japan. Having become globally competitive, Japanese exports first went to LDCs who were not in that industry and where competition from advanced countries was relatively similar. That is, export versus export. In addition, the markets were more price sensitive and aggressive pricing strategies by followers could overcome quality or service problems. After building export experience and further lowering costs and increasing quality, the industry began exporting to more advanced countries. The industries in those countries were often mature with many products commodities produced in high volume. Therefore, price competition was again a good entry strategy given reasonable quality and service. As Japan evolved, its own labor intensive, lower value added industries became subject to similar competitive pressures from followers like Korea. This classic cycle was first observed analyzing Japan's cotton textile industry and its corresponding decline in countries like the US and UK (Akamatsu 1962).

Given this industrial and trade development pattern, Japan's managers saw markets build first via imports from advanced countries. Then came domestic production, exports to the LDCs, exports to more advanced markets, and finally imports from less developed countries. Foreign direct investment has usually emerged during the later export stage to the advanced countries or as part of imports from the LDCs where those producers are often Japanese owned. This situation appeared in textiles in the 1970s where FDI was used to retain export competitiveness to advanced markets and for imports to Japan (Moxon 1984 and Ozawa 1979).

The import substitution stage has usually been the high growth period. By the initial export stage, domestic growth is often decreasing, motivating firms to export (Porter 1989). By the later export stage, Japanese and advanced country demand is usually mature so that gains in global market share are more of a zero sum game. Yet, exports also became a larger part of total production (Abegglen and Rapp 1972 and JEI 1992). This has meant that more Japanese exports have frequently led to political pressures from the affected countries in turn stimulating FDI to leap protectionist barriers and to preserve market presence. It also shows Japanese FDI has come at a much later stage in the product cycle than the motivation for US producers to capture new markets and profits for their innovations. For the Japanese, the markets exist and the products are not new.

Depending on the industry and Japan's growth rate, this sequence could take twenty to forty years. But because Japan was changing its ability to produce and use advanced technologies, at any time the industry mix was at different stages of development. The cotton textile industry might be declining, the synthetic textile industry investing abroad, the steel industry exporting successfully to several countries, the auto industry starting to export, but mostly to LDCs, semiconductors beginning production, and aerospace importing. This profile, for example, would describe fairly well Japan's structure in the late 1960s.

From a firm and manager's strategic viewpoint, including the role of FDI, World War II had a major impact on this evolution. The War put Japan's economy back about twenty years. Thus, she repeated the pattern described above in a short interval during the immediate postwar period. But though she had traced this process beforehand, the recovery exposed a new generation of managers to it, in a concentrated, very rapid manner and across all industries.

Japan's cotton textile industry, for example, prewar was the world's most competitive in all export markets, and her steel industry had exported to LDCs. This same pattern, however, was compressed again into the early postwar years. Therefore, every manager, even in traditional industries like textiles and steel, became conscious of the product cycle forces in his industry. They became aware too of cost reductions generated by
high growth, market expansion, and the introduction of new technologies though rapid investment (Aheglen and Stalk 1985).

By the early 1970s, this development pattern was clear MITI stated it as its industrial policy. The government should help upgrade the industrial structure by sponsoring higher value added, more technically advanced industries, while allowing less advanced industries to migrate. What had been a pragmatic ad hoc policy to resuscitate the economy became a formal development model due to Japan's success. This approach was adopted by countries like Korea and Taiwan, who also achieved high growth and economic success. This reinforced the evolutionary model's visibility and acceptance. However, in managing this process, a divergence began to emerge between firms’ intraregional goals to maintain their existence and global competitiveness and the government's interindustry development goals. This consideration has applicability to Japan's FDI. For example, based on its vision, MITI moved in the 1960s to phase out the cotton textile industry while promoting semiconductors via projects like VHISC (Very Highly Integrated Semiconductor). This approach has persisted into the 1990s with government protection and support shifting to supercomputers and satellites. But with each shift, Japanese investment abroad in the neglected product has increased as firms in those industries resisted the implications for them of being phased out in Japan. That is managers did not on the whole simply accept such competitive shifts as inevitable, especially if they had adverse firm results.

Still, they could not just move fungible production factors (e.g. capital and labor) from producing textiles, steel, and automobiles to producing computers and airplanes. Rather, they needed a mixed strategy combining resistance, acceptance, and pursuit of shifting competitive advantage while generally remaining in their basic businesses. It was usually not possible to sell or scrap their major assets or to dismiss their labor forces. In the US through the political process managers had sought and often received protection in response to similar competitive developments. A series of VRAs (“Voluntary” Restraint Agreements) in textiles, steel, television, machine tools, automobiles, and semiconductors were negotiated over twenty years in an evolution that confirmed interindustry product cycles and Japan's successful entry into constantly more advanced industries. US firms also lobbied for a downward revaluation of the dollar with some success in 1971-73 and 1985-87. US firms also invested offshore to lower production costs and thus maintain their corporate manufacturing competitiveness and their markets. Japanese synthetic textile manufacturers pursued a similar strategy after the Nixon Shock and first Oil Crisis. However, production jobs were lost to the home countries and transferred to the followers. The competitive shift was real.

This foreign investment strategy had the benefit, though, of frustrating native competitors in the host country while keeping support, sales, and managerial people employed at home. This was a new development, and showed that foreign investment was an extension of the product cycle pattern that could be found in increased imports from the LDCs but produced in plants owned by the importers. Finally, at home the US, European, and Japanese firms expanded into new more advanced industries that were either related to their existing businesses or were completely different, i.e. they upgraded and diversified. Many more Japanese companies followed this pattern of protection, offshore sourcing, diversification, and technical improvement after the 1985 yen revaluation and the automobile and semiconductor VRAs. They also made large gains in manufacturing productivity due to massive investments.

The potential to upgrade or expand an existing product line through R&D and technical change or interindustry development has always been an important aspect of the classic product cycle (Rapp 1975). Synthetic textiles emerge after cotton textiles; high grade alloy steels evolve after carbon steel; and color television follows black and white. As Japanese firms have advanced through these intraregional stages, they have used up the available pool of existing foreign technology, and have ceased to be followers, and have become innovators. Additional intraregional development then requires more invention. By the mid-1970s, as Baba (1989) argues the fast imitators had to become more innovative while the innovators had to become more cost oriented in their established products. Those who could not make this shift often fell behind competitively and became vulnerable to foreign or domestic acquisition as in GM-Isuzu, Merck-Banyu, and Nissan-Fuji Heavy. However, Japanese firms generally differed from many of their Western counterparts by not abandoning production of the simpler technological products. Rather, as part of their logical strategic behavior, their foreign investment strategy was to move the older products offshore while producing the newer ones at home. This has been done by Japanese consumer electronics and camera producers among others. Thus intraregional cycles have affected FDI by impacting the motivations behind particular offshore investments. While interindustry evolution can stimulate FDI to acquire new technologies for introduction into Japan, intraindustry evolution will stimulate investment to protect global market share. Not only did this mean firms did not have to give up sales and earnings, but they denied potential competitors from the NICs and LDCs a production platform from which to enter the industry and repeat to the Japanese what the Japanese had done to the Americans.

This FDI pattern shows up as investments in offshore assembly operations to leap various barriers as with Japanese automobile investments in the U.S. and Europe or synthetic textile investments in Indonesia. Similarly, investments in manufacturing facilities in the NICs and LDCs are used to source lower cost parts for assembly in Japan (Rapp 1992A) and elsewhere or as an export platform to remain competitive in products previously supplied from Japan (Moxon 1984). Indeed, intraindustry FDI seems to dominate Japanese corporate behavior.
patterns. This in turn is to be expected in terms of Nelson and Winter's theory (1982) since firms normally innovate close to their existing areas of experience. As foreign investment at least initially is an innovation, it is likely firms will keep to their existing areas of expertise to reduce the number of new variables. When they do diversify into new products via FDI, it is usually to access foreign technologies only available via an ownership interest. Because these technologies are then usually introduced first in the Japanese market, they are again reducing the unknown variables and are following a well known pattern of interindustry development. This latter type of FDI has occurred perhaps most visibly in small U.S. high technology companies (Dalton and Gethner 1990 and National Academy of Engineering 1991). While most are small, some sizable examples include Nippon Steel's investment in Prime Computer or Kubota's interest in MIPS. Yet, none approach the size of the major intra-industry investments such as SONY's acquisitions of Columbia Pictures and CBS records, Matsushita's acquisition of MCA. Toyota's investment in Georgetown, Honda's investment in Marysville, or Bridgestone's acquisition of Firestone.

Because of the investment responses by various MNCs to competitive change in the product cycle, PC analysis has been viewed as an obsolete predictor of competitive development. It is seen merely as a good description of the past. Indeed, several observers subsequently modified the classic product cycle to include foreign investment (Gilpin 1975). However, this type of evolutionary cycle should be differentiated from the classic PC as a "modified product cycle" (Rapp 1992A). Further, this modified PC is not applicable to all industries. Foreign investment played no role in the Japanese cotton textile industry, and the industry's ability to invest overseas to influence the development of competitors in the NICs and LDCs was quite limited. This is the classic format. In computers, though, foreign investment by US firms in Japan has played a major role (Anchordogy 1988), and is presently being used in various industries and countries by Japanese firms as an effective competitive tool as well, e.g. steel in the US or consumer electronics in Asia.

Thus there is an important difference between responding to economic forces and eliminating them and the way that takes place can have important competitive implications for firms and countries. The basic influences working to shift competitive advantage from one country to another under conditions of economic growth and development are still evident. A Korean experiencing the shift to another country of Motorola semiconductors or Nike sneakers is as adversely affected by the product cycle as a steel worker in Pittsburgh or auto worker in Detroit. The difference is the competitive impact on Motorola or Nike compared to US Steel or Ford. This differential impact on corporate and national competitiveness, however, is an important one, and explains the influence of PC analysis on Japanese multinationals' strategic thinking, competitive behavior, and in turn the role they see for foreign direct investment.

CORPORATE VALUE ADDED

A key element in these overseas investments is Japanese managers stated confidence in their ability to reduce costs to become the low cost producers of their existing product offerings even abroad or to reduce costs and improve quality of acquired or licensed technologies for sale in the Japanese market. Indeed, their ability to accomplish the former was a big surprise to many US manufacturers who thought Japanese entry into the US would provide a level playing field as they became subject to the same economics as the Americans.

This pervasive attitude among Japanese managers arises from their administrative heritage and is rooted in their postwar experience where significant and continual cost reductions were achieved over time. These real cost reductions have been a function of scale economies, continued product development, improvement in workers' skills, improved organizational structures, more sophisticated equipment, high investment rates, etc. For this reason, at least in Japan, market share has been a good predictor of profitability (Abegglen and Stalk 1985), and cost reductions have occurred most rapidly in the early stages of product or technology introduction when growth and accumulation rates are most rapid (Abegglen and Rapp 1972 and Rapp 1973). However, Japanese managers have extended the concept to continuous improvement or kaizen (Imai 1986) firmwide, and to include production processes in any environment.

If one rigidly extends cost reduction logic and accumulated production to international competition (Boston Consulting Group 1972), foreign competitors' costs should not match the leading innovator's until they have produced an equal amount. But this is never true. Rather, in the product cycle they catch up relatively quickly. The reason as argued by Abegglen and Rapp (1972) and Rapp (1973) is the follower starts on his own but lower cost reduction curve compared to the innovator. This is understandable given the cost and time needed to develop new products is substantial, while imitation is cheaper, thus the rationale for patents (Nelson 1990). That is, once a product exists and the technology is known, the cost of diffusion drops. The new entrant can often import and utilize the newest most productive equipment. This situation also serves to reduce the innovator's comparative average productivity level and makes it expensive to respond competitively via new investment. (See Dresser, Hoult, and Rapp 1972 on the advantage of Japanese investment in new basic oxygen furnaces compared to the US industry's existing investment in open hearth.) The older and more mature the industry, e.g. cotton textiles, the more readily available and cheaper the latest technology is to all. However, a technology does seem to drive its own organization and cost reduction pattern. Therefore, cost declines, while starting lower, seem to move in parallel, and changes in exchange rates impact costs by shifting the curves (Rapp 1973).
Still, if exchange rates are operating properly, more rapidly growing industries should gain comparative and absolute cost advantage over time. The relation between this and changes in competitive position in the product cycle is direct (Rapp 1973). This cost reduction pattern also explains why when a follower reaches the innovation stage further cost decreases occur slowly, require substantial additions in accumulated output, and are more expensive. It is easier and cheaper to add capacity and reduce costs when one can access available technology elsewhere. But in addition, the total size of the business and the total amount produced by then have grown quite large so the percentage impact of more sales declines. A logical consequence, therefore, is a rise in capital output ratios and a decrease in productivity improvements by industry, and for the country too as more manufacturing sectors mature. This occurred in Japan in the 1970s (Sato 1987).

Since most large Japanese firms and industries have now reached the innovation frontier for their main business lines, acquiring foreign technology to develop competitively and to grow has become a less viable strategy. When a firm exports to other advanced countries, the domestic market is already fairly mature and the company is close to the innovation frontier (Porter 1990). So there are fewer available new technologies to be introduced. At the same time, foreign competitors have become well aware of Japan’s competitive presence and will not knowingly assist them. Japan’s success in steel, automobiles, consumer electronics, semiconductors, computers, etc. has been so thorough and spectacular that almost any foreign manager projects this type of development to his own product even if it has not occurred. This restricts Japanese access to many new technologies and explains the need to actually invest in high technology companies as an alternative to the traditional licensing or joint venture format. This is most easily done in smaller firms that need the capital, but limits its impact on firm growth. Thus, the Japanese MNC has little alternative but to continue to invest in cost improvement strategies on a worldwide basis in order to maintain and increase global market share. This might be termed scale and share as opposed to Chandler’s Scale and Scope (1977).

An important aspect of these cost reduction effects has been their influence on Japanese managers’ attitudes towards quality and cost improvement (Imai 1986, Kratčič 1988, and others), since they firmly believe substantial and continuous cost reduction and quality improvement are possible through constant advances in manufacturing and corporate organization. In the same way almost any senior Japanese manager in manufacturing has experienced the product cycle in his industry, he has also seen rapid cost reduction and quality improvement due to high growth, new technology, and capacity additions. An important reason for this is that his firm probably operated this way to remain competitive.

It was during this process that Japanese managers discovered that cost and quality improvement moved together rather than in opposite directions. In the US, quality control had occurred at the end of the production process where statistical sampling techniques prevented defective items being shipped to customers. More frequent samplings, while reducing the chance of shipping bad product, were also more expensive both in manpower and reduced output shipped. Still, since most sales were domestic and producers had after-sales service, often as a profit center, many felt problems could be handled in the field at little or no cost to them.

The Japanese exporters who have evolved into MNCs could not do this, especially in consumer electronics. They exported directly to large price sensitive US retailers who were only interested in sales and customer satisfaction. These retailers had little repair capability, and did not want time consuming returns. The Japanese manufacturer had no large US service network and could not afford to ship goods back to Japan. They were also fighting an image for shoddy goods. In sum, the product had to work immediately and be virtually defect free if the producer was to export to this market. To achieve this result cost effectively required developing a defect free production process. This was then discovered to reduce costs too as less inventories, repairs, unusable returns, service, and transportation costs were incurred. In addition, customer satisfaction improved. This situation combined with improved quality and price competitiveness to increase market penetration which further reduced costs due to greater accumulated production. Over time these companies then had the self-reinforcing and interactive benefits of high quality, low costs, and global competitiveness. Because of this administrative heritage, Japanese managers have confidence in their routines to achieve cost advantage even in established industries in a particular location and in using this cost advantage to maintain and build market share. This in turn insures the firm’s long-term viability and survival as well as the employment and wage stream of the managers and their colleagues. It does not seem that return on corporate capital plays a large role in these decisions.

In sum, managing under conditions of high growth and intense competition made managers conscious of and forced them to respond to cost management and international shifts in cost advantage to maintain firm competitiveness. The Japanese postwar situation was somewhat unusual, though, in that this process occurred across a wide spectrum of industries and not just high tech or those on the innovation frontier. This led to the evolution of a different sets of rules and routines to run their corporations even in established global industries like steel and automobiles than was typical of their Western counterparts (Bartlett and Ghoshal 1989 and Rapp 1992). These differences included the corporate routines relating to overseas investment which emerged from this administrative heritage.

There are thus essential differences in the experiences of senior managers in Japanese multinational manufacturing firms and their Western counterparts that result in different attitudes and approaches to foreign direct investment in both format and objectives. The growth and development their firms have experienced has been
evolutionary rather revolutionary. They have normally
developed from the successful domestic introduction of
established foreign technologies. Having no proprietary
technologies or product innovation risk, they gained
competitive position from constant cost and product
improvements that translated over time into larger market
share in Japan and overseas. Their approach to FDI is a
direct extension of these experiences.

As already noted elsewhere (Nelson and Winter 1982,
Baba 1988, Kogut 1992, Rapp 1992A, and Mitchell,
Shaver, and Yeung 1992 ) when firms grow in scale,
managers develop rules and routines for running these
larger companies. Consistency and predictability are
especially important for repetition, and repetition has been
necessary if the firm’s output is to be produced
continuously in terms of cost and quality objectives.
These firms characteristically produce relatively the same
output over time and are thus rule and routine based and
have histories. In total these guide corporate actions and
only change slowly in response to changes in the
economic or "selection" environment affecting the delivery
of the product to the customer. That is, the decision rules
and the routines used to implement them are based on
historical experience and feedback from actions taken in
response to specific circumstances. Routines therefore
incorporate organizational memory. If the feedback is
favorable, the action is repeated. If not favorable, it is
dropped or modified. However, even when a favorable
outcome is repeated, the organization usually "searches"
for adjustments in the routines to achieve a more efficient
outcome. This is especially true if the action involves an
innovation or new technology. That is, changes in
routines are innovations and there is a close relationship
between organizational innovation and technical
innovation. As Nelson and Winter (1982) have argued
organizations evolve to accommodate technology and the
organizations modify and improve technologies. The
process is interactive and involves trial and error
("searching") as well as learning by doing at which the
Japanese appear very adept. It is also consistent with
managing product cycles and continual cost improvement.

In their "searches", firms are restricted by existing
organization, technologies, and resource availability as to
what they can do next. Whether planned or stochastic,
innovations represent changes in a company's routines.
Therefore, while their competitive behavior is continuous
and dynamic, they normally make organizational or
technical innovations slowly and in the neighborhood of
what exists. It is not an exercise in comparative statics or
in moving from one optimal equilibrium to another.
Because Japanese MNCs are similarly bound by custom
and history, they are constrained by their existing
organizations and resources, and are not able to choose
from all possible technologies and organizations, even
with perfect foresight. This incremental evolution and
reliance on past experience, including product cycles and
cost improvement capabilities, is thus logically
manifested in their FDI pattern.

Toyota, for instance, until the 1980’s produced
mostly in one location. Production had followed the
product cycle from import substitution through export.
Export growth was extremely successful, driving down
costs and improving global market share. However, a
revalued Yen, a US VRA, and intense political pressure
forced management to realize a US investment was
necessary and inevitable. But their response was quite
ordered. First, they established that their existing
assembly and production routines worked in the US by
forming a joint venture in an old GM plant in California,
using primarily imported parts. This approach was low
risk, involving little capital and no new commitments to
Japanese suppliers.

Having adapted its assembly routines to the US,
Toyota began reproducing its Japan based organizational
supply and production structure in Kentucky using some
of the same staff who had managed the Freemont
operation. This step, however, involved much more
capital as well as a commitment to the suppliers it
encouraged to invest. The investment, though, was staged
with engine manufacture coming after the assembly plant
was operating. The overall result, especially the
movement of its main keiretsu suppliers to the US, in
turn reflected Toyota's history. They were part of the
transfer of Toyota's kamban and just-in-time systems,
demonstrating these could be replicated too. In addition,
having developed managers capable of transferring
Toyota's routines to other environments, and having
gained the organizational experience it could be done.
Toyota was prepared to make other production
investments abroad such as in the UK. Thus this FDI is a
clear evolutionary process stemming from the company's
history and management's perception of its competitive
advantage as lying in their organizational structure and
production system.

The investment was a next logical step in the product
cycle, but was undertaken primarily to preserve an
important and irreplaceable market. As Fruin (1992) and
Sheard (1990) have noted, large Japanese firms are more
specialized than their Western counterparts, effectively
achieving scale through increased share as opposed to
increased scope (Chandler 1977). This result is logical
when one considers that generally technology has been
acquired rather than innovated, and competitive position
has been developed by constant improvements of a product
and its production process over an extended period.
Further, extensive reliance on networks and subcontractors
to reduce costs (Smitka 1989 and Fruin 1992) and long
term keiretsu relationships (Gerlach 1992) encourages
firms to dedicate resources to existing businesses.
Additionally, because they are keiretsu members, they are
actively discouraged from moving into someone else's
activity. Thus, economies of scale tend to come from
market deepening rather than horizontal diversification.

We can also discern in the Toyota example that
considerable "searching" and checking seems to have
preceeded each step and each change built on inputs from
prior events as well as on changes in their technology and
organizational base that occurred during the period. There
was not any attempt, though, to implement a local
solution such as an American style assembly plant using
local parts suppliers or the acquisition of an existing plant.

Another important aspect of the Toyota approach is that it also conforms to the logic that emerges from Nelson and Winter's (1982) observation that large organizations are composed of people with different skills and that part of a firm's function is to mobilize these skills to meet corporate goals. Some skills like computer programming are explicit and people with them can be hired or replaced. However, other skills are tacit or firm specific such as knowledge of the company's programs. Such knowledge is usually not articulated but operates innately through employees' normal interaction. Nevertheless, such tacit knowledge seems especially strong and important in the Japanese environment due to the homogeneous culture and population. Indeed, most managers are similarly educated college graduates with tenure measured in decades, and many firms recruit from the same colleges year after year. However, Krafick (1988) and Cusumano (1985, 1988) argue this is particularly true of Toyota, and certainly such tacit knowledge seemed to play a critical role in determining Toyota's approach to FDI.

This innate rule set is sometimes referred to as the corporate culture that helps organize the skills that deliver the result to the customer. As such, it interacts with the organization's skill base. The more efficiently the rules and routines work, the more successful the corporation. But many innate skills contributing to competitive success such as the knowledge of one's rule in the kanban system are not readily transferred to or imitated by other firms. The more critical such skills are to success and the longer it takes to learn them, the more important it is to retain personnel and to closely control foreign investment. Therefore, any routine promoting long term employment is beneficial to such firms and their industries, and for FDI to be successful, it must replicate or adapt these routines abroad.

Japan's long term employment system is therefore very important in replicating tacit knowledge's benefits in FDI and in turn strengthens the corporate commitment to its employees. For example, Matsushita's ability to manage globally but act locally as described by Bartlett and Ghoshal (1988, 1989) is dependent on training and retaining key technical personnel over several years. Similarly, Porter (1989) notes countries succeed in businesses accommodating the demands of top managers and financial markets, i.e., the sources of overall management and capital. He then observes that Japanese managers' tenure is relatively long and that the owners of capital, including the main bank, are stable shareholders. Further, because banks, unlike the US, can own shares, the objectives of lenders and shareholders diverge less often.

Because innate skills are so important to the successful operation of Japanese corporate routines where competitive advantage and corporate success is built gradually over long time periods by continuous incremental improvements rather than fundamental technological leaps, historical experience operates with economic reinforcement to perpetuate these activities. That is, the importance of tacit skills reduces their benefit to another employer resulting in low labor mobility. This reduces the employees' incentive to transfer while encouraging him to commit to his current employer and to further develop his tacit skills. This also applies to subcontractors. Thus, firm, suppliers, and employees' interests are closely tied.

Conversely, leading US firms have generally been successful innovators and according to Dunning (1991) and others invest abroad as a way to extend product profitability. They are also heavily dependent on individual action and an employee's ability to quickly transfer skills to the product and the corporation. But since Japanese firms have usually developed as successful imitators, adopting and improving products that began as imports, their success has come from improving cost and quality via better manufacturing, and this is what they must capture in their FDI. Imitation takes less resources than innovation since one need not perfectly copy (Nelson and Winter 1982 and Heiduk and Yamamura 1990). Knowing the product exists, the imitator need only create a result that is an economic success, i.e., can compete profitably. But to do this he will have to develop his own more efficient process and routines because he cannot constantly monitor the innovator and must yet compete in the market. Thus, he is facing different competitive circumstances than the innovator who had little competition at the time of innovation, and cost effectiveness becomes a paramount consideration. Leading Japanese firms have been extremely proficient at this process.

These Japanese organizations have administrative procedures, organizational arrangements, and decision-making processes (routines), many of which are technology based, that are geared for successful imitation. This has been reflected their overseas investment activities both at the beginning and end of the product cycle. So when circumstances changed and practices needed to be altered, the arrangements were varied according to the firm's competitive situation rather than being scrapped since they had little experience at developing totally new products. Acquiring technology through FDI, for example, became an acceptable alternative to the more traditional routines of joint ventures or licensing when these became more difficult to accomplish.

While imitation was cheaper than innovation, eventually firms had to innovate their technical and organizational formats (Baba 1989) and it had to be cost effective. Once a new format was established, subsequent innovations and improvements usually occurred within the neighborhood of the existing routines. Frequently these have been based on further imitations of changes in world technologies. That is, emphasis has continued to be on imitation and improvement, as noted by the high proportion of R&D funds flowing to "D". This is partly explained by commercial success, but even when true invention has been required, imitation has often persisted. This is because accepted routines submerge differences within the organization so that existing practices have a
strong inertia. Change in existing routines including switching from imitation can thus be difficult if it deviates very far from current practice. Indeed, if consensus decision-making is an established corporate routine, it is particularly difficult to move far from the norm since any strong holdout for the status quo can prevent change. Thus, acquiring existing technologies and emphasis on market share and cost reductions continue as strong corporate goals for most Japanese MNCs. Similarly, there is a strong compulsion to imitate or follow other competitors. This pattern can influence FDI as seen in Matsushita following SONY or Bridgestone following Yokohama and Sumitomo (Ohmae 1991).

As already noted, growth is rapid during the imitation stage and slows once innovation is required. Yet rapid growth facilitates change, so change is likely to occur along fairly predictable organizational paths once growth slows because variations in routines outside the immediate neighborhood are less easily accommodated. Given Japanese industries' product cycle development, the period of foreign direct investment other than for acquiring new technologies is likely to be a slow growth period. The corporate psychology will therefore be to preserve market share, and the preference will be for replicating established routines abroad. This differs from US firms looking to capture foreign markets for a hot new product or technology. These replicating routines then can become components for related organizations. This may be especially true relative to keiretsu or long-term supply arrangements as in the automobile industry. The foreign direct investment by Japan's tire and steel companies, for example, is functionally related to the FDI strategies of the major Japanese automobile manufacturers. Therefore, Japanese MNCs' foreign direct investment again appears to be an extension of their historical competitive development and success, which will then affect future investments and global competitive interaction.

SUPPORTING INSTITUTIONAL ARRANGEMENTS

In assessing Japanese MNCs' overseas manufacturing investments, we have referred to several supporting institutional arrangements relatively unique to Japan. These too have their evolutionary character. For example, the existence of stable shareholders and closely related corporations arose from the breakup of the prewar zaibatsu during the Occupation. Shares were sold to the public, and the institutions with the necessary funds were the banks, insurance companies, and other firms. Thus began cross-share holdings between affiliated companies as well as equity ownership by banks. This system was further developed during the sixties when Japan was opened to foreign investment and the fear of foreign takeovers increased (Gerlach 1992). Similarly, the stable employment structure emerged from the serious labor dislocations of the immediate postwar period. Business and government had a real incentive to encourage company unions and stable employment (Shimada 1988). Management sought by mechanisms like the permanent employment system, company unions, and seniority wage system to moderate labor unrest which was costly in lost production due to strikes. Given Japan's weak economic condition, this could have undermined the firm's competitive position or affected its survival.

However, as Japan experienced high growth in the 1950s and 60s, these routines had unexpected benefits reinforcing their influence. Because labor shortages began to appear, the most available workers became recent college and high school graduates. There was intense recruiting competition as they were available, had the best education, and were the least expensive. Given continued high growth, firms also would require more future managers than they had now. However, this recruitment practice resulted in lower average wages for fast growing firms. Indeed, faster growth meant faster wage reductions. Falling wage costs made firms more competitive. They could reduce prices, increase market share, and hire more young workers. Conversely, slow growing firms and industries lost cost position (Abegglen 1984).

The main bank and bank share holding system combined with the government's indirect finance policies also to stimulate growth. The zaibatsu dissolution and the immediate postwar hyper inflation had eliminated traditional capital sources. Direct financing from the small capital markets could not support rapid industrialization. To deal with this problem, the government developed policies that discouraged consumption while encouraging savings to flow to the industrial sector through the banking system. An important link in this system was the Bank of Japan's discount window, where a bank that loaned money to a client could then discount it with the BOJ. It was then possible to lend these additional funds to the same or other companies. The banks in turn had an incentive to favor firms in whom they had share holdings. This was tax efficient since the increased value of the shares held was not taxed but interest on loans was at a high corporate rate. Over time, these shares became the source of the banks' hidden reserves. However, this equity ownership also increased banks' willingness to finance a clients' growth via debt. Since interest on the debt was tax deductible but dividends were not, the companies saw this as beneficial as well.

While this was the system's origin, it too had unanticipated and evolutionary competitive effects. It uncoupled a firm's growth and increase in sales and market share from higher retained earnings. A firm could grow using pretax dollars since the main banks were not interested in being repaid because they were also under pressure to grow and secure their own long term existence. The loans became evergreen, actually increasing over time. Further, because the after tax cost of capital was lower using more leverage, Japanese firms could price lower and grow faster than their US counterparts even if operating costs were higher and they had lower margins. In addition, they could plan investment strategies based on the availability of funds rather than the rate of return on capital or retained earnings as long as interest cost were covered.
Similarly, Japanese firms were pushed into being cost effective imitators because at the War's end, Japan's industry was technologically far behind the US. They needed to import technology to improve quality and productivity. The government had the same desire to develop an efficient manufacturing base but also to conserve foreign exchange. Government permission was therefore required to import technology, and they used this control to disperse technology so it benefitted the most firms and to set royalties to protect both foreign exchange and retained earnings. No patent based monopolies were permitted. MITI's view was that competition would decide the most efficient producer. They exercised "administrative guidance" so the best technologies were licensed at similar prices. Japanese companies were thus precluded from technology bidding wars or importing old technologies to remain competitive with a rival. If IBM licensed technology to Hitachi at x, then RCA had to license its computer technology to NEC at x. This process conserved foreign exchange but also kept imitation costs for firms in an industry roughly equivalent. In this manner a large number of fast imitators were created, who all emphasized cost reduction strategies to survive. This emphasis on corporate survival was logical given the long-term employment system that had developed with few job alternatives, especially for senior management. The lack of proprietary product technology meant successful imitators had to emphasize low cost high quality production to grow competitively.

In sum, postwar Japanese development created a relatively large number of competitors in several important industries that were mostly imitators with access to equivalent technology. Under such conditions, competitive success became highly dependent on the ability to cut costs by constantly improving corporate routines and by closely tracking the technological base. Further, because of intense competition, such cost improvements had to be passed along to customers fairly quickly in lower prices. Monopoly rents from controlling supply were virtually impossible without product patent protection. In addition, the incentive to invent was low since more advanced technology could be acquired, while invention would be time consuming and costly. In this way, Japanese firms grew rapidly and borrowed aggressively. Expansion capital was at a premium and funds for basic R&D compared to development were limited.

The capital shortage during the high growth period encouraged specialization and the delegation of functions to trading companies or subcontractors, while cross-share holdings mitigated the risks of this increased dependence on other firms. This supported the wide use of subcontractors and the evolution of the keiretsu system. Capital shortages encouraged narrower corporate specialization too (Sheard 1991 and Fruiin 1992), and because main banks supported the associated companies as a way to assist a firm's competitive development, the bank related groups were are part of this interactive support network.

However, the self-reinforcing success of these various components is what established these corporate routines and that logically extended them to foreign direct investment. Successful firms were companies that cut costs best and priced similarly. This was achieved by growing rapidly even ahead of market demand because this lowered labor costs, supported more loans, and incorporated the latest technology most rapidly into the production process. Due to technology availability, there were many initial competitors in an industry so the domestic market saturated quickly, encouraging exports. But to develop export opportunities, price competition was important. So it was necessary to be an effective cost cutter. If you were a good cost cutter, exports grew rapidly, so your domestic cost position improved. Increasing domestic market share then made one more export competitive, etc., etc. Therefore, it is logical that cost cutters emerged as Japan's industry leaders (Baba 1989) whereas in the US it has usually been innovators.

In this environment, tracking known technologies by aggressive investment policies and the pursuit of market share even during economic downturns became the established routine. Yet, when several industries reached the innovation frontier after 1973, more attention was paid to innovation even by the price cutters (Baba 1989). The innovators that survived, though, had to pay more attention to cost controls. This demonstrated the continuing emphasis in Japanese corporations on reducing costs even while recognizing more innovation was necessary. This fact was evident in their cost reduction strategies overseas and the incorporation into their FDI of their production processes (Florida and Kenney 1991). If you are a low cost producer, you logically believe your competitive success and corporate survival depends on its continuation since reasonably the low cost producer is unlikely to be driven out of business. Several other producers will wither first. But such weeding out would reduce global supply, stabilize market conditions, and create upward price pressure. Further, constant cost reduction may be more achievable than profit maximization, since firms usually don't control market prices and demand, but they can manage some costs. In any case, this approach has worked very well for Japanese companies in the postwar period (Inai 1986).

Despite their emphasis on acquiring and improving existing technology, Japanese firms investors generally only invest once a product has been developed, produced, and sold so that substantial innovation risk is avoided and the technology is ready for improvement and marketing under the existing formula. Successfully investing in what is known has been what Japanese MNCs have done best historically and is the routine they repeat. It also reflects the risk averse rules that emphasize continued corporate existence and gradual improvement over time rather than major innovational change. This reinforces and interacts with their historical tendency to exploit their strengths in process and cost improvement. In this manner, innovation and technology selection would appear to be a routine reflecting large Japanese manufacturing corporations' experience in the product cycle and what they
more than competition with major foreign corporations. In addition, these routines have less to do with extending profit opportunities for new technologies than concern for protecting global market share, maintaining low cost production, and insuring firm survival. (Porter 1992 also emphasizes Japanese and German firms' strong emphasis on corporate survival.) Thus, it is expected that future routines will evolve similarly and will continue to adapt to pressures and changes in the economic and political environment. Some pressures and considerations expected to affect Japanese managers overseas investment decisions are the following:

- The main drive will remain corporate existence. Senior executives' survival and benefits plus lifelong commitment to firm, customers, employees, suppliers, banks, etc. requires this, and alternative employment is limited. That is managers appear more concerned with insuring the firm's continuous wage stream than maximizing corporate profits.
- To insure this goal, the company needs to protect against the effects of further yen appreciation and shifts in cost competitiveness towards the NICs in many major products as well as to offset persisting US protectionist pressures to reduce the trade deficit. His task of maintaining corporate competitiveness will be complicated by an aging labor force and low birth rates combined with continued corporate growth that will make Japanese labor shortages acute, especially for technical personnel.
- Constantly upgrading intra-industry technology will continue to be necessary due to competitive pressures from Japanese and foreign competitors combined with customer demands. Some upgrading will depend as it has since the War on continued access to constantly improving global technology. This can also be a way to counter the shift in competitiveness towards the NICs while dealing with cost pressures due to labor shortages and a stronger yen.
- Because Japanese producers in an industry face similar external environments, and managers have similar backgrounds, the competitive compulsion will be that most competitors will follow the leading Japanese firm. For FDI in mature markets like autos or consumer electronics in the US and Europe, this can lead to overcapacity and "excessive competition" (Ohmae 1991). But since government action usually preserves market share, being the most aggressive investor domestically and overseas and the lowest cost producer remains the best strategy (Rapp 1992).
- To achieve these objectives, technology transfers to the NICs and LDCs will need to be controlled, if possible via one's affiliates. The NICs in turn will try to emulate Japan and develop global competitors who will evolve with the product cycle.
- While in products with global markets, the Japanese market is fairly saturated for established products, it is still a large and important market to control and to introduce various innovations because of its demanding must be supplemented by overseas sales to maintain competitive position. In either case, having a global presence is necessary. Maintaining or growing market share domestically and abroad is thus an important strategic component, especially as Europe and North America form economic mega-states. Japanese MNCs must participate in these large advanced markets to be globally competitive, especially if their customers and competitors are moving in this direction. Thus FDI is a key element in their corporate strategies.
- The Japanese multinationals should be able to pursue their strategies with little domestic political interference because the Japanese government has no clear economic goals and has been weakened by scandals. Their ability to exercise authority over MNCs outside Japan is weak. Therefore, managing the FDI process is likely to be left to the companies themselves, competitors, and foreign governments.
- The Japanese government's primary development concern is actually continued interindustry development, while their major economic problem is growing transfer payments to an aging population. Thus, they will continue to sponsor their successful development routine of interindustry evolution in areas like space, supercomputers, and bioengineering. The MNCs, though, have little desire to phase out their businesses since this could threaten their corporate existence. They are thus more interested in intra-industry development. In fact, because industrial policy necessitates creating a preferential access to resources for selected industries, present policies would transfer resources from established industries like automobiles to fields like aerospace. Therefore, rival claims and objectives exist between the government's and the MNCs' strategies and what is needed to achieve them. This lack of policy congruence is new and will lead to more independent action by the MNCs, including FDI.

Given these considerations, it is logical for large multinational Japanese manufacturing firms to develop routines to manage the product cycle within which foreign investment will be one but an increasingly important strategic activity. That is, FDI is part of a total corporate system for creating and maintaining competitive advantage to insure corporate existence and needs to be examined from that perspective. For instance, by investing in US steel companies and upgrading their technology and capital stock to supply Japanese auto companies, Japanese steel producers have made the US firms and themselves less vulnerable to competition from the NICs. Further, as higher quality steels are used by Japanese auto companies, such as very thin light weight one sided zinc coated sheets, this forces US auto producers to improve quality too. However, the product is only available from Japanese affiliated US firms. Therefore the NICs are denied the market share they might capture via a classic product cycle evolution as the US industry matured and its firms became less competitive.
had little choice but to pay the required price for a major acquisition. However, they had confidence that over time they could substantially reduce Firestone’s costs by introducing their production routines. This was partly based on their own experience with a Tennessee plant they had bought from Firestone previously and partly on the experience of other Japanese manufacturing firms. The recent move from Akron probably reflects this process.

This investment process can also protect the Japanese market to the extent customers constantly upgrade and the NICs cannot build experience and lower costs from penetrating the US market. A similar situation can be seen in TVs where the Japanese have both maintained US production, and exported large screen sets from the US to Japan and elsewhere. The TV producers have thus created a cost base that has controlled the NICs penetration of this market. Upgrading to high definition TV may be an extension of this routine.

They have also invested in the NICs themselves. Sanyo TV’s from Korea, Canon cameras from Taiwan, etc. Manufacturing investment in Malaysia, Thailand, Korea, Taiwan, Indonesia, etc. have grown enormously. If this modern manufacturing capacity frustrates local competitors in what would have been vulnerable mature products produced in Japan, the Japanese MNCs may have prevented replication of a Korean Toyota, a Taiwanese Matsushita or an Indian Toray. They have thus achieved Gilpin’s (1975) modified product cycle development. More importantly, they have co-opted many of those countries’ “advanced factors”, who in Porter’s (1989) vision provide the basis for long-term competitive advantage in some industry. If Japanese MNCs in addition succeed in translating their long-term employment routines to their local subsidiaries or limiting skill transfers to potential competitors because many are tacit that are only useful within the total corporate system, they will then retain and build on the benefits of these advanced factors. No wonder Korea constantly complains about not receiving the latest technologies from Japan, but it does show that Japanese MNCs are consciously managing the product cycle based on their own administrative heritage and using FDI as a strategic tool.

Capturing these advanced factors not only helps the MNCs competitively by making it difficult for NIC competitors to develop, but it alleviates their shortage of Japanese technical personnel that is a growing problem. Similarly, investments in US based laboratories or software acquisitions (e.g. Columbia and MCA) are part of strategies to supplement resources unavailable or limited in Japan. This type of FDI will create a new competitive environment where firms no longer compete only for global market share based on superior technologies, organization, or production routines. Competition will now extend to key global resources especially for the advanced factors Porter feels are the basis for sustained advantage. US scientific personnel represent such resources to large Japanese manufacturers and are an apparent objective. The laboratories established or announced by major auto, electronic, and pharmaceutical firms all indicate this. Investments in venture capital funds and small high technology firms plus the increasing number of worldwide yearly patents filed are additional signals.

Autos demonstrate the routines being pursued of which FDI is a part and the need to understand them in a wider context. Overall, the Japanese companies are using the recession to offer high quality cars at a good price without backing off the low end products either, contrary to US car companies’ behavior in the early 1970s. In luxury autos, they are repeating their routine of building experience in Japan, then entering price sensitive export markets where they can compete head to head. Export to export, i.e. against the Europeans in US luxury imports. It also uses some of the capacity being freed by investments in the US. In the regular car market, FDI is being used to build capacity across political and cost barriers to maintain market share. To achieve this result they are extending their keiretsu and kamban systems to the US and Europe to achieve superior cost position, thus realizing Ohmae’s (1991) concern about excess capacity and an industry shakeout given two mature slow growing markets with the Japanese as the low cost producers.

This result may come quickly in the US if they introduce the computerized ordering system they have in Japan. This may now be possible given a US production base. If customers could order a car to their specifications as they can in Japan with the expectation of three week delivery, the reduced cost of dealer inventories (financing and space), year-end sales, and customer rebates are significant. At the same time customer satisfaction could increase, and dealer networks could expand dramatically if a service station with a CRT and a few demonstration models is a potential outlet. These marketing routines were developed in response to the same high land costs that drove inventory reduction. These routines are well-known in manufacturing, but another manifestation is computerized ordering since there is little room in Japan for showrooms or dealer inventories and space is expensive. Since the system is now developed, the diffusion cost is low provided the manufacturing base exists to supply it.

The competitive importance of this cost advantage rises as lack of restraint and a drive for competitive survival combine with excess capacity to stimulate an industry shakeout. The possibility of getting a consensus on restraint seems remote since someone would strongly resist the change in routines. Restraint except under government guidance could threaten a person’s job and even the firm’s survival if something went wrong. This is why routines like competitive compulsion persist. Also, the present routines of more luxury cars, investing abroad, transferring manufacturing processes, supplier cooperation, using Japanese banks, etc. have been very successful. Therefore, feedback says keep going and Japanese MNCs’ experience is that in a shakeout, the low cost producer wins.

Finally, FDI is part of auto producers’ efforts to extend the major interindustry synergy begun in the 1950s and 60s in steel and ships (Rapp 1992A, Nelson and Winter 1982). The auto producers used and contributed to
this in two ways. One, they had reliable suppliers of high quality, low cost steel, making their cars more competitive. Their rapid growth supported and furthered this trend. Two, once they acquired sufficient experience to export, they needed a low cost method to ship cars in volume. The specialized car carrier was developed to meet this need. Eventually it lowered shipping costs from Japan to the West Coast below Detroit's via truck or rail. These interactive mechanisms continue though the development of better steels for autos and the steel companies' US investment presence. In addition, if Japanese producers can use the same car carriers for exports from the US they use for imports, they can reduce per car transport costs given a round-trip rather than a one-way passage. This will lower delivery costs from the US and Japan, improving cost position in both markets.

Another element in this competitively beneficial interactive industry process is now emerging due to the increased use of electronics in automobiles. Car stereos, car phones, car faxes, electronic maps, car TVs, electronic fuel injection, climate controls, cruise controls, etc., etc., confirm this. Many such products are being developed in Japan, location of the world's dominant consumer electronics firms. Logically, Japanese car manufacturers are leaders in introducing these features. The close relationship between these two sectors and the worldwide presence of Japanese electronics via exports and foreign investment give Japanese auto producers another routine that will be an important element in their global strategy. If these strategic routines are successful, Japanese consumer electronics, steel, and shipbuilding companies will do well too.

Based on such observations of competitive behavior, the strategic decision rules and corporate routines influencing Japanese MNCs foreign direct investment would not seem a drive for profit extension on particular technologies or products or for greater returns on employed capital as has been hypothesized by some for US MNCs. Rather, firm survival remains the over-riding goal given limited alternative employment plus de facto permanent employment for top management. To achieve this objective, cost minimization globally is viewed as key since it insures competitive success. These cost reduction routines were developed initially in response to capital shortages and limited physical space but have proved effective globally, as has the ability to improve cost position and quality simultaneously. Strong quality and cost positions underpin corporate survival in a shakeout. Constant technical development is critical to constant cost improvement and thus firm survival. In keeping with its risk averse orientation, though, the stress is on access to established technologies and incremental development. Risk in FDI will be avoided due to limited employment alternatives, consensus decision-making, and the availability of proven technology. Similarly, innovations overseas will remain close to current businesses since this is what existing routines, resources, technology, risk aversion, and network pressures support. The firm will also rely on similar routines from suppliers. This is based on experience with successful growth via broad technology acquisition, continual development, and minimal failure. At the same time, Japanese firms may be willing to pay more for such key resources, bidding up their cost to local competitors. In turn, they will expect to minimize future costs through introduction of Japanese cost-cutting routines and increased market share.

To achieve strategic growth, foreign investment decisions will not be governed by debt or balance sheet considerations. This is because maintaining or increasing global market share via aggressive investment and pricing strategies is viewed as key to retaining competitive position. This coincides with the recognition that Japanese competition is global so that defensive and offensive actions are necessary. Reliance on indirect finance and the main banking system overseas is likely to persist, too, and such borrowing will hedge exchange risks and reduce taxes. Long-term employment will assist global managers and will strengthen such investment routines because firms can justify investment in extensive training and worldwide job rotation. However, foreign investment remains only one element in a total corporate system of routines with common objectives and needs to always be considered in relationship to other elements such as domestic capacity additions, corporate relationships, and trade. In any case, it will not be pursued for its own sake, i.e. just to receive a high rate of return. Conversely, as there is a perceived need to manage the technology flow overseas and to control competitors' access to such resources, firms may make marginally profitable investments in the NICs or advanced countries to achieve this objective. Similarly, they may not hold offshore production units to particular profit objectives, but will assess a product line's global profitability or strategic objectives. This approach to internal cost management can generate real price/performance and competitive problems for foreign producers who depend totally on local markets or look to an individual model's profitability in separate markets.

It may not be possible to predict the competitive outcome of such differential objectives, but it is possible to note that the nature and form of Japanese FDI will in many cases differ from those pursued by US firms, as does the attempt to manage the cycle and influence its outcome. Also, preliminary evidence (Florida and Kenney 1991) indicates that Japanese manufacturing MNCs have been successful in transplanting their system and its competitive advantages. Such firms still control TV and broad based consumer electronics worldwide even though product cycle advantages have migrated to countries like Korea, Taiwan, and Malaysia. Conversely, only one weak US TV producer remains, and it has an affiliation with a Korean manufacturer. In autos, Japanese car manufacturers appear to be increasing global market share, especially in luxury models. There are many transplants in addition to those in autos and consumer electronics such as in tires, construction equipment, machine tools, zippers, chemicals, noodles, soy sauce, etc. that are reportedly doing well. Some top scientists are joining their new laboratories. They have also concluded many technology sharing agreements with
foreign competitors as well as numerous small high tech companies. (See Dalton and Genter 1991 study on technology linkages.) The leading Japanese corporations appear to be influencing the competitive agenda for their industries with others following.

Some view this overseas investment as only slightly different from Western MNCs. But it is actually significantly different and is evolving in a manner many did not predict. For example, the presumption that investment abroad would place Japanese MNCs in the same cost position as local producers is now questionable, and therefore the assertion local producers will easily win is less clear. It was also assumed they would have the same capital availability as local competitors so their capital costs and structure would be similar. Further, they would be constrained in rapidly expanding overseas capacity because of the large funds required. However, these events did not occur and debt raised from Japanese banks combined with equity linked Euro-financing permitted financing of even very large investments and hedging of foreign exchange exposures. Reduced taxes and lower overall capital costs may have resulted too. The keiretsu system spread these costs as well. Indeed, using Japanese affiliated suppliers abroad may allow firms to spread development costs on a worldwide basis and to modify transfer prices for cost advantage in especially competitive markets. Finally, unlike their US counterparts, they have developed potential exports from the US or Europe, perhaps because their managers have long export experience and know it can lead to cost reduction benefits at the offshore locations as well as local political leverage by improving a country’s foreign trade balance.

Dealing with such consequences of Japanese FDI may be difficult for non-Japanese managers as it requires getting outside their own motivational framework, and possible changes in their established corporate routines. Given that past policies to manage the political economic consequences of Japanese competition have not worked too well (Rapp 1992), new approaches need to be considered. This is especially true for sectors where the potential for Japanese competitive success creates an environment where non-Japanese firms may press for political relief despite Japanese manufacturers’ local constituencies. This can then get caught up in concerns over taxes, transfer pricing, technology access and control, invention versus exploitation, anti-trust, national origin, state subsidies, reverse dumping, and treaty relations within North America and Europe. Most politicians will resist thinking about such issues, but managers should be aware that there are complications in the background as Japanese firms become even more successful by gaining global market share in major industrial sectors. Yet, US experience testifies that no one gained market share or won a global competitive contest in the courtroom. Therefore, competitors must develop their own counterstrategies which will require an understanding of the routines and motivational characteristics driving Japanese foreign investment in conjunction with their historical origins at the firm, industry, and economy level.

If this is done successfully, it can have larger implications since the compelling logic of Nelson and Winter’s evolutionary theory is that macro-economic results are composed of micro-decisions. If some micro-units are large, they can impact the entire economy. Therefore, attention to details is important even if one views that what happens in the marketplace is final.

SUMMARY AND CONCLUSIONS

This paper has posed that Japanese manufacturing MNCs have a different set of routines or motivations driving their current overseas investments than their Western counterparts based on differences in their historical development and experience with the product cycle. In this respect, the analysis seems more in sympathy with the theories of those like Teece, Pisano, and Shuen (1990) or Kogut (1992) who postulate that strategic behavior is a function of core competencies and historical experience or with the results of Kester’s (1991) recent study on Japanese corporate control. In particular Japanese MNCs appear more interested in firm survival and maintaining or expanding global market share in their existing businesses. Diversification is risky and is clearly a second best alternative. Similarly, they do not invest for profit or rate of return considerations but to insure employment income. Under these conditions, they make foreign investments and pursue strategies with implications that are not fully appreciated by foreign competitors. The appropriate response to these initiatives is not clear-cut and in any case needs to be decided by each firm based on its industry and competitive situation. There are no neat solutions.

Yet, the paper does provide an alternative analytical framework within which to assess the situation. Further, there should be no mistaking that the competitive impact of Japanese foreign direct investment on an industry or firm’s competitive environment needs to be addressed. This is because what has been described is a successful past, present, and quite likely future competitive scenario for large multinational Japanese industrial concerns based on the apparent continuation of established corporate routines of which FDI is now an integral part. These successful routines are focused in certain companies producing products in a few industries. The most immediate response should therefore come from competitors who find it difficult to counter them. If these difficulties emerge from incomplete understanding of a Japanese competitor's routines, the analysis presented here may be a useful in searching for and innovating some new counter routines. Any viable strategy or new routines must take account of the routines pursued by one’s competitors and their likely evolution, i.e. that they exist, have an impact, and are not static.

However, the analysis and evolutionary theory would both emphasize that while Japanese decision-making has many common factors, each competitor, industry, product is different and must be analyzed in its own context, particularly its place in the product cycle. There is no single readily apparent response to the effects of Japanese
FDI as the situation will differ by firm and product. Rather a series of searches and innovations in a complex of routines will be required. Further, the competitive context or "selection environment" will change with alterations in conditions and innovations among competitors. Analyzing these considerations is a complex and fuzzy task; so developing new competitively successful routines will require considerable analysis and discussion within and even between affected corporations as in the case of Sematech. Indeed, more cooperation is clearly an option being explored in several industries, including between Japanese firms and foreign firms (e.g., Ford-Mazda or Toshiba-Motorola) or among Japanese firms (e.g., Isuzu-Subaru), even as they compete elsewhere. Such developments will vary by competitor according to its strategic resources, including its corporate relations or government support.

Given the apparent success of Japanese MNCs' current routines, any fundamental change is unlikely without a successful counterstrategy. This is a long-term process since innovating a successful routine will bring a response from the affected Japanese firms who will pull Japanese competitors along. There are no immediate knockouts since these corporations have the resources and motivation for the long haul. Responses to this likely scenario will require new routines with additional modifications, etc., etc. Governments may have to go through a similar exercise if they want to influence the nature of Japanese FDI or are the owners of affected firms. Such a political economic analysis in turn will form part of the complex engagement with the Japanese government on trade and industrial policy. This argues that firms should generally rely on their own strategies and resources to generate the appropriate response.

REFERENCES

Available on request.