CIRJE-F-143

The Strategic Effects of Firm Sizes and Dynamic Capabilities on Overseas Operations

A Case-based Comparison of Toyota and Mitsubishi in Thailand and Australia

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Chapter 8

The Strategic Effects of Firm Sizes and Dynamic Capabilities on Overseas Operations A case-based comparison of Toyota and Mitsubishi in Thailand and Australia

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Summary

In international business, much attention has been directed to the international expansion of firms based on their use of resources and competitive capabilities that have been built up in a home country to create a competitive advantage over host-country firms. More recently, the organizational capabilities and competitive advantages of Japanese manufacturing firms in general (in autos, electronics, etc.) have been analyzed as important factors in the establishment of overseas transplants. The theoretical framework of the overseas application of home-country management resources has been effective as a basic tool in analyzing the fundamental issue of international operations of the firm. However, the existing models, which tend to emphasize application of country-specific resources, does not sufficiently explain the frequently encountered question of why multinational enterprises (following, MNEs) from the same home country pursue different strategic paths and actions when managing overseas operations.

The present paper attempts to incorporate a dynamic and firm-specific perspective and empirically analyze how differences in the financial resources and organizational capabilities of MNEs from the same home country affect the strategy and competitive behavior of their operations in the same local country. The analysis will center on the two Japanese auto assemblers, specifically Toyota Motor Corporation and Mitsubishi Motors Corporation, which have local production facilities in both Australia and Thailand. These two countries provide interesting case studies because in both the local operations experienced a serious crisis in recent years. The crisis for local auto producers in Australia began in the 1980s with the removal of protectionist policies and the rapid liberalization of the auto market. In Thailand, exceedingly severe conditions for local auto assemblers were caused by the 1997 Asian economic crisis. The present paper will focus its attention on the differences in the responses by Toyota and Mitsubishi to these crises, which we characterize as "larger competent firm" and "smaller competent firm" respectively.

The two firms in question have both maintained international competitiveness in production in their common home country of Japan, in addition to building top-level local competitiveness in their Australian and Thai operations. However, when faced with a growth opportunity and a subsequent crisis, the responses of the local operations of the firms were markedly different. It is anticipated that behind these differences in firm conduct lie interfirm differences in firm scale (i.e. financial power) and dynamic organizational capabilities (e.g., capability-building capability) in their home country. The present paper will attempt to delineate these interfirm differences and their effects on firm conduct to explain why two firms from the same home country would show such different patterns of conduct even though they face the same local opportunities and crises.

1. Introduction

<u>Firm-specific Patterns of Local Operations by Multinational Manufacturers</u>: The purpose of the present paper is to analyze how the behavior of MNEs' overseas operations for adaptation to local environmental changes is affected by such firm-specific characteristics as firm sizes and organizational capabilities. The focus of our empirical case study is the overseas production operations of two Japanese automobile MNEs, Toyota and Mitsubishi Motors, in Thailand and Australia. The paper pays particular attention to the differences in firm size and organizational capabilities of these MNEs, as well as the impact of these characteristics on patterns of the firm's adaptive behavior to certain crises in their local production operations.

In international business, much attention has been directed to the international expansion of firms based on their use of resources and competitive capabilities that have been built up in their home country to create a competitive advantage over host-country firms (Hymer [1976], Vernon [1971], Bartlett and Ghoshal [1989]). More recently, the organizational capabilities and competitive advantages of Japanese manufacturing firms (in automobiles, electronics, etc.) have been analyzed as important factors in the establishment of overseas transplants (cf. Abo et al. [1994]).

The theoretical framework that MNEs apply home-country competitive advantages in oversea expansion has been useful as a basic tool in analyzing the fundamental issue of the international operations of the firm. However, this model, which emphasizes the application of country-specific resources, is often insufficiently capable of explaining the frequently encountered question of why firms from the same home country pursue different development paths and different strategic choices when managing overseas operations.

First of all, we need an additional framework to explain the firm-specificity of individual MNEs. The existing literature tends to emphasize country-specific behavioral patterns and the performance of MNEs in general (e.g., advanced versus developing countries, Japan versus Western firms), while de-emphasizing the inter-firm differences of MNEs from the same home country. And yet, it is fairly common to observe significant differences in the local operational patterns of, for example, the two Japanese multinational automobile manufacturers, considered in this paper. Thus, there is a need for us to turn our attention to firm-specific factors, such as firm size and organizational capabilities.

Second, we need to stress the dynamic aspects of the MNEs' organizational capabilities. The commonly employed framework, which seeks to explain the competitive actions of a local subsidiary by the application of resources developed in home countries, tends to regard local actions as passive responses to local environments and headquarters' policies. The autonomous capability-building processes of the local overseas operations have necessarily received little attention. However, it is known that, when confronted with a local crisis, local operations may be able to accumulate and improve their organizational capabilities as they deal with the crisis. In explaining such a phenomenon, in place of a uni-directional and static framework, what is needed is an analysis that examines the dynamic "capability-building capability" of a MNE (Fujimoto [1997] [1999]), which may be applied to its local subsidiary to promote the building

of capabilities in the local operation.

Third, as has been shown in Fujimoto (1998) and Fujimoto and Sugiyama (2000), the capability development paths of foreign operations themselves do not necessarily proceed according to a deliberate plan, but rather are frequently processes fraught with unintended successes or failures, as well as trials and errors. In other words, the path of local capability-building tends to be of an emergent nature. Therefore, what is in need of explanation is the "evolutionary capability" (Fujimoto 1997, 1999) of a firm to gain comparative advantage over rivals given a capability building process so emergent in nature. In other words, the behaviors of MNEs may be explained not only by their deliberate strategies, but also by their "emergent global strategies."

In summary, this paper emphasizes three additional aspects of the MNE's behavior in its local operations: firm-specificity, dynamics, and emergent process.

<u>Toyota and Mitsubishi Motors in Thailand and Australia</u>: Based on the above agenda, the present paper will incorporate the above perspective and empirically analyze how differences in the resource endowments and dynamic capabilities of firms from the same home country affect the strategy and competitive behavior of their operations in the same local country.

The analysis will center on two Japanese automobile assemblers, specifically Toyota and Mitsubishi Motors, which have local production facilities in both Australia and Thailand. These two countries provide interesting case studies because in both the automobile sector has experienced a severe shock in recent years. The crisis for local auto producers in Australia began in the 1980s with the removal of protectionist policies and the rapid liberalization of the automarket. In Thailand, exceedingly severe conditions for local auto assemblers were caused by the 1997 Asian economic crisis. The present paper will focus its attention on the differences in the responses by Toyota and Mitsubishi Motors to these crises.

The two firms in question have both maintained international competitiveness in production in their common home country of Japan, in addition to building top-level local competitiveness in their Australian and Thai operations. However, when faced with a crisis, the responses of the local operations of the firms were markedly different. It is anticipated that behind these differences in firm conduct lie interfirm differences in scale, financial strength, product strategy, and capability-building capability. The present paper will attempt to clearly delineate these interfirm differences and their effects on firm conduct to explain why two firms from the same home country show such different patterns of conduct even though they face the same regional environment.

2. Framework: Internationalization of "Large" and "Small" MNEs

<u>Firm Size and Organizational Capability</u>: First, let's illustrate our framework of analysis. Generally speaking, there are at least two main factors affecting firm behavior and competitiveness in the same industry or market: firm size and organizational capability. The former is a factor emphasized by standard economics. Organizational capability, on the other

hand, means a system of organizational routines that create firm-specific and difficult-to-imitate advantages. A firm's organizational capability consists of (i) static capability to consistently outperform rivals at any given point in time, and (ii) dynamic capability that enables the firm to improve its performance and capability faster than rivals (Penrose [1968], Nelson and Winter [1982], Teece et al., [1992]). Thus, when we observe different patterns of performance and behavior by two MNEs in the same local environments and in responding to changes in these environments, we can infer from this fact that they may be different in their firm size, static organizational capability regarding higher productivity and quality, or dynamic capability regarding improvement of such productive performance and capability.

Emergent Global Strategy: The global strategies of MNEs have recently been discussed from the point of view of international linkages of resources and capabilities. Transnational strategy (Bartlett and Ghoshal [1989]), for example, emphasizes international and bilateral linkages of human, material, financial and technological resources and knowledge between a firm's international operations. International Motor Vehicle Program of MIT (Womack, et al. [1990]) also advocated a similar global network.

The existing works on global strategic management, however, tend to base their explanations on the "strategy as plan" concept, i.e. strategy that is driven by a prior grand design and deliberate decision making at headquarters. Rational decisions do more or less guide the international operations of manufacturing firms, but it is also possible that a global network of operations may evolve into something the original intention did not predict.

In the field of strategic management, the notion of "strategy as plan", in which strategic intent precedes strategic implementation, has been a prevalent idea for many years. (Andrews [1980], Hofer and Schendel [1978], etc.) However, there has also been another concept of strategy, "strategy as pattern," which assumes the possibility that competitive strategy may be formed even without a competitively rational prior intention. Mintzberg and his colleagues call a strategy that was unintended but realized "emergent strategy" (Mintzberg and Waters [1985]).

Actual strategy formation tends to be an unpredictable mixture of emergent strategies and deliberate strategies (Fujimoto [1997] [1999]). A firm's distinctive dynamic capability to create effective organizational routines in this kind of emergent situation may be called "evolutionary learning capability."

Such an argument on emergent strategy and evolutionary capability may also be applied to the case of global strategy. In this paper, we will also pay attention to "emergent global strategy," in which a firm builds the organizational capabilities of its local facilities through ex-post responses to local crises.

<u>Analytical Framework</u>: Based on the above discussion, we propose an analytical framework that may provide additional insight for understanding difference in the local behaviors of MNEs (Figure 8.1). This matrix classifies manufacturing MNEs based on (i) relative size of the firm as a whole and (ii) static organizational capabilities in manufacturing operations (e.g., productivity, and quality in production and product development). The resulting

four categories are: competent large firms; competent small firms; incompetent large firms; incompetent small firms. Note that what we refer to as "competent" and "incompetent" are not the financial and managerial capabilities of the entire MNEs, but their operational capabilities that bring about higher productive performance in their factories and development centers. Note also that the terms "large," "small," "competent" and "incompetent" are conceived of as in relative terms. "Competent firm" means that the firm's operational performance is ranked among the best worldwide; "Large firm" means that the firm is listed among the largest companies worldwide in the industry. According to this classification, Toyota and Mitsubishi Motors may be classified as "large competent firm" and "small competent firm" respectively.

As for Toyota, it is also known that the company possesses a superior dynamic organizational capability, an "evolutionary learning capability" in particular (Fujimoto [1997] [1999]). That is, Toyota may be characterized as "a large competent firm that also learns and evolves rapidly."

<u>Stages of Environmental Changes</u>: Let's turn to the environmental side and identify three stages before and after the period of growth and crisis (Table 8.1). Although our foci in this paper are Thailand and Australian automobile market during the 1980s and 1990s, a similar pattern may be observed in other emerging markets. Thus, the present classification may be broadly applicable to various situations in other regions and industries.

(1) <u>Initial Condition: Small Local Market and Import Substitution Policy</u>: Less-developed car-producing countries in the 1960s and 70s were generally characterized by small markets (less than 200,000 units per year) and local governmental trade policies aiming at import substitution by restricting or banning complete vehicle imports. As a result, many of the automobile MNEs chose to establish knock down (KD) assembly plants in each fragmented local market and produced a small number of many different models each of which was designed in the MNE's home country. Local governments also enforced local content policies that facilitated local production of a certain percentage of automobile parts.

The local facilities for assembly and parts production naturally lacked international competitiveness. Their exports were limited to small volumes headed for small neighbor markets. In addition, the band-wagon effect among the MNEs resulted in many auto makers rushing to build assembly and parts plants in each of the small markets, creating an extremely fragmented production structure with several thousands vehicles per model per year being produced at most. As a result, the sizes of the local production facilities did not reflect the firm size of the MNEs in their home countries — the local production facilities were all small regardless of the MNE's sites.

(2) <u>Production Expansion Stage</u>: The second stage is the production expansion phase. The automobile MNEs, which had struggled with the chronic problem of small market size and inefficient small volume production in the earlier stage, were able to succeed in expanding local production to a certain extent.

In some cases, production volume expanded mostly due to the expansion of the local market itself. In many Asian and Latin American countries, for instance, increases in per capital

income and the emergence of a middle class resulted in expansion of both vehicles in use and annual sales volume in these local markets. This was particularly the case in South East Asia from the late 1980s to the early 1990s. The Australian market, on the other hand, had been basically saturated for many years, but it still experienced some expansion thanks to a favorable business cycle and the creation of new segments (e.g., the emergence of the sport utility vehicle segment).

In other cases, exports contributed to the growth of local production. This was particularly the case when the host country's government adopted export promotion policies, when the local production facilities had certain competitive advantages vis-à-vis neighboring countries, or when there were some free trade markets near the country.

Whether the growth of the local facilities relies on local sales expansion or export growth may depend upon the global strategies, financial resources and competitiveness of the MNEs in question. As is discussed later, smaller MNEs may have a higher tendency to choose local production expansion through greater exports, partly because the number of local facilities worldwide is comparatively limited (i.e., one local production facility is more likely to be shared by multiple markets).

In any case, responding to the expansion phase, the automobile MNEs sometimes replaced their aging KD assembly plants of earlier days with new and expanded plants. Such cases were observed in both Thailand and Australia during the 1990s, particularly in the case of large and cash-rich firms, such as Toyota.

(3) <u>Production Shrinkage Stage</u>: The production expansion stage may be followed by a period of "crisis for the local factories," the third stage, which is characterized by an unanticipated and sudden shrinkage of the production volume of the local facilities. Such crises could be caused by at least three paths. First, a local economic crisis (e.g., Asian currency crisis of 1997) may cause a collapse of local automobile sales. Second, a sudden change of the local government policy toward trade liberalization could cause a crisis for the local factories as a flood of imports crowd out inefficient local production. The Button plan of the Australian government, implemented since the mid-1980s, is a typical example. Developing counties' participation in WTO after 2000 could be another typical case of such policy changes. Third, a market collapse or protectionist measures by the main export destinations of the local factories could create a crisis for the local plant.

3 Hypotheses: Responses to the Local Crisis by "Large" and "Small" Firms

<u>Assumptions</u>: We will now propose a few hypotheses about the competitive behaviors of "large competent firms" and "small competent firms" facing the same local market before a local crisis (i.e., the production expansion stage) and after the crisis occurs (i.e., the production shrinkage stage).

Regarding the case analysis later in this paper, Toyota can be regarded as a typical "large competent firm," whereas Mitsubishi Motors is a typical example of a "small competent firm." This is because they are significantly different in firm size, while they are both competitive in

production and development productivity.

Let's also assume that both the "large competent firm" and the "small competent firm" make use of their operational advantages in manufacturing and deploy overseas production facilities, and that their overseas facilities are located in the same set of host countries as a result of the oligopolistic "bandwagon effect" between MNEs. Also, the firms may possess a high level of dynamic capabilities (e.g., capability-building capability, evolutionary learning capability) in addition to their static manufacturing capability (Fujimoto [1997] [1999]). Based on the above assumptions, we may derive at least three hypotheses of inter-firm differences in the local behavior of the firms as follows.

1. Hypothesis on Pre-Crisis (Production Expansion) Period: A "large firm" with richer financial resources, will tend to set up a larger number of "local-market-oriented" production lines and develop a larger number of "locally dedicated models" than a "small firm." If a large firm's model turns out to be close to a "world model" that can be sold in multiple markets, such a model may be produced in more than one factory internationally.

A "small firm," on the other hand, needs to cope with a large number of overseas markets with a smaller number of production lines and models. Therefore, it tends to be more oriented to a "world model" that is shared by multiple markets, as well as "export-oriented" production lines aiming at global markets, compared with to "large firm." This tendency applies to both home country and overseas factories. If customers in each local market have very unique needs that may be filled only by a country-specific model, or if production control cost for handling multiple export models is high, other things being equal, the "small firm " may suffer from competitive disadvantage vis-a-vis the larger firms.

<u>Hypothesis 1</u>: A "large competent firm," other things being equal, has a greater tendency to have "local-market-oriented" production lines and "locally dedicated models," compared to a "small competent firm" with similar operational capabilities.

2. Hypothesis on Short-term Effects in Post-Crisis (Production Shrinkage) Period: Let's now assume that a crisis for a local plant (e.g., surge of imports, collapse of local market) occurs, which dramatically decreases shipment volume from the local factory to the local market. In this situation, a "small firm," which has had to rely on export-oriented production lines and product models during the expansion period (Hypothesis 1), is more likely to enjoy unintended advantages vis-a-vis a "large firm," because the former 's locally produced models are less dependent on the local market which is in crisis. In other words, the "small firm" has been forced to build manufacturing capabilities to cope with many overseas markets because of its smaller number of products and lines, which turned out to absorb the local shocks better once the crisis happens. This phenomenon may be regarded as a "global emergent strategy," as the small firms enjoy "unintended but realized" competitive advantages.

A "large firm," by contrast, has to live with product models and production lines dedicated to the local market. This was regarded as advantageous during the expansion period because

they fit more flexibly to the local demands, but it turns out to be a disadvantage in the Production Shrinkage Stage, because the production line cannot absorb the shock via export expansion. Thus, at least temporarily, the "large firm" is more likely to suffer more from the local shock (Fujimoto and Sugiyama, [1999]).

<u>Hypothesis 2</u>: A "large competent firm," other things being equal, tends more to rely on "local-market-oriented" production lines and "locally dedicated models," compared with a "small competent firm." As a result, it is affected more seriously by the local crisis of sharp demand decrease, compared to "small competent firms".

3. Hypothesis on Local Capability-Building in Post-Crisis (Production Shrinkage) Period: Then, what should firms facing the unexpected local crisis do? The small competent firms, with poorer financial resources at the headquarters, will try to minimize additional local investment and accelerate export drives, thereby absorbing the shocks more effectively. Since the "small firms" tended to rely more heavily on exports in the expansion period (Hypothesis 1 and 2), further export expansion is likely to be easier for the smaller firms than for larger firms.

A "large firm," on the other hand, is more likely to have a bigger production slump because its plants tend to be more dependant on the shrinking domestic demand (Hypothesis 1 and 2), due to over-adaptation to the local market. If the company's dynamic capability is low, then it will try to survive by minimizing investments and simply waiting for the recovery of the market. In an extreme case, the company may close the local facility.

If the "large firm" has not only a high static manufacturing capability but also a high level of dynamic capability of capability-building, the company may combine such a dynamic capability and necessary financial investment for converting its local-market-oriented plants to export-oriented ones through rapid capability-building for exports. The local subsidiaries may play a leading role in executing such a change in the local manufacturing capability.

If the "large firm" succeeds in the "export capability-building of its local plants" in many countries and enriches its global logistics network among its complementary production facilities, that MNEs as a whole may change itself from a "multi-domestic firm" to a "global firm" (Porter [1985]). This "globalization," however, is not necessarily based on a deliberate global strategy, but on ex-post trial-and-error in response to the crisis. In this sense it may be regarded as "emergent global strategy" (Fujimoto [1999] [2000]).

<u>Hypothesis 3</u>: A "large competent firm" with a high dynamic capability of capability-building, facing a local crisis, tends more to build its local plants' export capability in order to minimize the shock of the local demand shrinkage, other things being equal. As a result of such an emergent strategy, the firm as a whole becomes closer to a "global firm" with a network of complementary production.

Having illustrated our analytical framework and a few hypotheses derived from it, the next step is to examine how this framework can explain the actual competitive behaviors of

manufacturing MNEs facing expansion and subsequent local crisis. Although this paper is exploratory in nature, aiming at hypothesis building rather than rigorous hypothesis testing, a preliminary case analysis fits this purpose.

In the remainder of the paper, based on our problem setting and analytical framework, we will investigate the cases of Toyota Motor Corporation (a typical "large competent firm with a high dynamic capability") and Mitsubishi Motors Corporation (a typical "small competent firm") and their local operations in Thailand and Australia. In each of the cases, we will examine if the two firms responded to local expansion and subsequent local crisis in a consistent manner with our framework and hypotheses. We will pay special attention to the dynamic and emergent aspects of their local capability-building.

4 Exploratory Consideration: Comparison between Toyota and Mitsubishi Motors

First of all, as an exploratory effort, we sketch the two Japanese MNEs, which are the targets of our study, and describe their situation in Thailand and Australia. As we have already considered, the factors needed for the firms to make suitable targets are: manufacture and sales of similar products, firms having originated in Japan, and manufacturing being done in the same host country. Both Toyota Motor Corporation (following, Toyota) and Mitsubishi Motors Corporation (following, Mitsubishi Motors) meet their conditions both in Thailand and Australia.

Before beginning the case studies, as the premise, we will survey the common points and differences between Toyota and Mitsubishi Motors, both in Japan and worldwide.

<u>Common points</u>: The principal common characteristic of Toyota and Mitsubishi Motors is, in short, they both operate internationally with their competitive advantages in manufacturing, and research and development.

First, both companies have already established a lean manufacturing system, and they maintain remarkable competitive advantage internationally both in productivity and in quality (Womack, et al. [1990]). In addition, they also maintain a competitive advantage both in overall product development performance and in lead-time of product development (Clark and Fujimoto [1991]).

Second, both companies have operations in almost the same areas, including Thailand and Australia. This phenomenon can be considered a result of the "Band Wagon Effect"; rival companies invest in the same area at the same time because of opposition action between oligopoly companies (Knickerbocker [1973]).

As a result, both companies faced almost the same environmental changes in the Asian automotive market, namely the rapid growth of the Asian automotive market in 1990s (especially until 1996) and its sudden shrinkage in late-1990s. On the other hand, in Australia where the automotive market has matured, the two companies initially were subject to the same import-substitution policy that aimed to protect the local market from international competition. And later, they faced the same crisis, i.e. the sudden shrinkage of the market for local assembled

automobiles. Moreover, both firm have engaged in KD operations for supplying the local market both in Thailand and Australia since 1960s.

<u>Fundamental differences</u>: Never the less, despite the similarities, there are also great differences between the two companies in terms of corporate scale and financial resources, both in Japan and worldwide.

Toyota is the leader of the Japanese automobile market, where it manufactures more than 3 million vehicles per year. Toyota's assembly and component plants are mainly concentrated around Toyota city, Japan. Toyota's total production capacity is over 3 million vehicles. Moreover, Toyota has capital tie-ups with Daihatsu Motors, which is strong in micro cars, and Hino Motors, which is strong in large buses and trucks. Toyota has left the manufacture and sales of micro cars, large buses and trucks to these manufacturers. Furthermore, Toyota has left the R&D and manufacturing of Toyota-branded light trucks and mini-vans to Kanto-Jidosha and Toyota-Shatai, two of Toyota's subsidiaries. Toyota itself focus its resources on the R&D and manufacture of passenger cars. So, we should therefore view Toyota's actual strength in R&D and manufacturing as going far beyond what can be found in Toyota proper.

Turning to Mitsubishi Motors, we see that it is 4th largest firm in the Japanese automobile market, and has a production capacity of about one million vehicles. Its main plants in Japan are located in Nagoya and Kurashiki, located about 400 kilometers away from Nagoya. Mitsubishi Motors has no subsidiaries to leave its R&D or manufacturing functions, so in order to maintain its full lineup of vehicles, it has had to develop and manufacture vehicles ranging in size from micro cars to large buses and trucks. So, naturally its resource allocation toward R&D and manufacturing has to be somewhat "broad and little". This restriction has affected firm decision-making regarding overseas operations, as we will be mentioned later.

Throughout the 1990s, Toyota's sales were roughly 3 times that of Mitsubishi Motors'. Moreover, Toyota's operating income has been more than 10 times that of Mitsubishi Motors'. Naturally, these differences also produce differences in available financial resources for product development and new models.

In spite of its limited financial resources, however, Mitsubishi Motors operates widely overseas much the same as Toyota. This can be understood to be a result of oligopolistic action. In order to operate widely overseas with its limited financial resources, Mitsubishi Motors' foreign subsidiaries have traditionally been joint ventures, with the firm not being too particular about possessing a majority. Such firm behavior contrasts remarkably with Toyota, which has sought to operate its foreign subsidiary from a majority stake.

Toyota is noted to have a relatively high dynamic capability, in other words an "emergent capability", meaning the firm is able to evolve its organizational routines ether planned or emergently over the long term (Fujimoto [1997], Fujimoto [1999]). World famous Toyota Manufacturing System can also be regarded as the result of this emergent capability. There is no research that shown that Mitsubishi Motors is inferior in this dimension, but at least, there is much historical evidence that indicates Toyota has a remarkable dynamic organizational capability (Fujimoto [1997]).

As we mentioned above, both Toyota and Mitsubishi Motors belong to a stronger group of firms vis-à-vis their static competitive capability, productivity and production quality. Also they are similar in the geographical pattern of overseas operations. However, there are great differences between the firms in terms of in their company size. Moreover, in dynamic capability, Toyota may be in higher position.

5 Case Study (1): Asian Economic Crisis and Toyota/Mitsubishi Motors in Thailand (Table 8.2)

In this case study, following the research framework outlined earlier, we consider the environmental changes in Thailand and Australia in two stages: Production Expansion Stage and Production Shrinkage Stage. (Table 8.1) The former is the stage in which a company is forced to increase its local sales as well as local production, because of local market growth or industrial policy that targets production growth per model. The latter is the stage in which the market for locally-build vehicle decreases for some reason, for example because of an economic crisis, an increase in imported-cars, or the cancellation sales of tie-up, etc.

Overview of Automotive industry in Thailand and Time division of the target study period: In Thailand, there has never been an industrial policy that excluded foreign control of local automobile manufacturers. The industrial policy focused on import-substitution using foreign designed vehicles performed by foreign-owned local manufacturers, including localization of parts. So, foreign owned manufacturers assembled their vehicle solely for local market, and these firms included Japanese auto manufacturers. However, a major environmental change took place in the 1990s, and foreign manufacturers, including the two targets of this research, had to change their strategy in Thailand and vicinity. We consider these changes by dividing them into 2 stages. (Table 8.3)

- (1) Production Expansion Stage---From the early 1990s to 1996, because of rapid economic growth, automotive sales in Thailand grew rapidly, and manufacturers were obliged to increase their production. The automotive market in Thailand was forecast to increase to more than one million vehicles a year; so many manufacturers increased their total production capacity.
- (2) Production Shrinkage Stage ---After 1997, because of the Baht depreciation in 1997, automotive sales in Thailand fell sharply. In 1998, they fell to about 150,000, about one quarter of 1996 total. So, it became necessary for manufacturers to start and rapidly increase their exports, in order to survive.

<u>Initial Condition</u>: From the 1960s, both Toyota Motor Thailand (following: TMT) and Mitsubishi Motors did small scale Knock Down assembly locally, but they were operating only import-substitution plants under the Thai Government's regulations on imported vehicles. Mitsubishi Motors' KD plant merged with its sales company in 1987 (MMC Sittipol Co., Ltd., following, MSC).

MSC's strategy for Production Expansion Stage: In short, MSC's main strategy in this stage was construction of an export-oriented plant for 1-ton pick-up trucks (following: pick-ups). It was necessary for Mitsubishi Motors to expand its production capacity, in order to fill the increasing demands for pick-ups in Thailand, Oceania, Southern Europe, and so on. However, at that time Mitsubishi Motors' sales in Japan were doing well, with little demands in Japan for pick-up. So, Mitsubishi Motors thought that it would be better for its operations in Japan to focus on passenger cars and recreational vehicles, rather than to increase pick-up production.

From such reasons, Mitsubishi Motors decided to construct export-oriented plant for pick-ups in the first half of 1990s. Mitsubishi Motors decided to construct the new plant in Thailand, because it is the largest market of pick-ups after the U.S., and it was also a reasonable site for labor and plant location. In 1996, MSC began operation of its export-oriented plant for pick-ups.

So, the strategic attitude of the "Small Company" was aimed at the effective use of its limited managerial resources emergently led to the strategic decision: "construction of the export-oriented plant for pick-ups". (See Orihashi [2000b] for details.)

TMT's strategy for Production Expansion Stage: In contrast, TMT constructed new plant in the suburbs of Bangkok, and transferred main production of its passenger cars: Corolla and Soluna (Asian specific vehicle). So, Toyota's old plant, which is near Bangkok city center, concentrated its production on Hilux (pick-ups). (Corona still produced at the old plant, too.) TMT expected the demand for passenger cars to increase rapidly together with motorization in Thailand, so the new plant was designed mainly for production for domestic Thai market. TMT did not engage in large-scale CBU exports and its position in Toyota's worldwide strategy remained as an "import-substituting plant".

MSC's strategy in the Production Shrinkage Stage: MSC started first with Australia as the destination for its large-scale exports, because Australian vehicles, like those in Thailand, are right-hand drive and Australia is also geographically near to Thailand. MSC has since expanded the scope of its exports to about 90 countries. The main markets are EU countries, especially Spain and Portugal, and Australia. No exports to the United States which is the biggest market for pick-ups, has yet been recorded. The reason for this is because there is a high import duty for commercial vehicle imported into the U.S., and because pick-ups that are sold in the U.S. are about 4000cc while Thai-produced pick-ups are about 2500cc. At present, most of Thailand-build pick-ups are exported because of the shrinkage of domestic Thai market. So, MSC has had to shut down the old plant that had been manufacturing pick-ups for the local Thai market. As MSC started its large-scale export earlier, the company has been able to keep ahead of other manufacturers that examined and started large-scale exports after the crisis.

<u>TMT's strategy in the Production Shrinkage Stage</u>: The Asia Economic Crisis occurred in 1997, when TMT had already finished construction of its new plant and its operations were well

under way. Like other local manufacturers, TMT's capacity utilization rate dropped as local demand shrank.

Faced with this difficult situation, TMT decided to increase its exports, reduce its human resources and greatly increase its invested capital. Late in 1998, in accordance with a Hilux (pick-up) model change, Australian model production moved from Japan (Hino) to TMT. But TMT has had a hard time purchasing local parts that meet Australian Design Rules (ADR), so the local content ratio of TMT's export models still remains low. At the same time, TMT has been working hard to increase exports of parts, such as diesel engines of pick-ups sold in Japan and the EU. In order to increase its exports, TMT is working hard to raise the local content ratio of export models and to strengthen its manufacturing capability.

<u>Summary (Toyota and Mitsubishi Motors in Thailand)</u>: As we have seen above, in Thai Automobile industry, we could observe the pattern that match with our hypothesis in this paper.

Japanese automotive manufacturers in Thailand faced environmental change, namely a rapid increase of local production continuing until the Asian economic crisis. Among these, Mitsubishi Motors, the "small competent firm", expanded its production on the assumption that it would export the worldwide model it would produce pick-ups. The possession of this capability for worldwide exports gave the firm a "buffer", so that only a small effect was caused by the Asian economic crisis. Mitsubishi Motors, having already built-up manufacturing capability for export, with fall of Thai Baht, was able to smoothly expand exports from Thailand. We must also take into consideration the fact that MSC already had previously experience doing large-scale export. This experience came from when it engaged in relatively large-scale export of the Passenger car; Lancer to Chrysler Canada in the first half of the 1990s. MSC managed to overcome the crisis by shutting down its KD plant for the domestic market and integrating this plant's production into its export-oriented plant.

Mitsubishi Motors' strategy, which was influenced by its lack of resources, ended up fitting with the environment after the Asian economic crisis and has been a source of competitive advantage.

On the other hand, Toyota, the "large competent firm with a high dynamic capability", developed a local oriented vehicle (passenger car) and expanded its local production (including the construction of a new factory for passenger cars) prior to the crisis. These decisions came to put great pressure on the management of TMT, requiring capability reorganization; TMT needed to gain the capability for exports. Because Toyota possesses a dynamic organizational capability that allows it to cope with unexpected environmental changes like the Asian economic crisis, this reorganization has been taking place.

Though only one case of two firms in one industry in one country, the case study shown above in generally consistent with Hypothesis 1, 2 and 3 regarding "small competent firm" and "large competent firm with a high dynamic capability".

<u>6 Case Study (2): Crisis due to Production Reduction and Toyota and Mitsubishi Motors in Australia</u> (Table 8.4)

In this section, we discuss an environmental change that took place in the Australian automobile industry beginning in mid-1980s and the strategic reaction of the Australian subsidiaries of Toyota and Mitsubishi Motors: Toyota Motor Corporation Australia (following, TMCA) and Mitsubishi Motors Australia Ltd. (following, MMAL) respectively. (See Orihashi [1998] for additional detail.) The drastic change in industrial policy was the cause of the environmental change. As an initial step, the history of TMCA and MMAL up to the mid-1980s is outlined.

Overview: TMCA and MMAL to the mid-1980s: In early 1960s, Toyota engaged in CKD export contract with Australian Motor Industries (AMI) and started to sell passenger cars to Australia. After the late-1960s, Toyota started to commit deeply to Australia, taking and then gradually increasing its equity stake in its Australian operations. In 1976, Toyota participated in the 85% localization plan for passenger vehicles in Australia. In order to meet the 85%, Toyota worked hard to localize its main components. In 1977, Toyota constructed facility for engine and press in Altona, a suburb of Melbourne. (TMA)

On the other hand, MMAL was formerly Chrysler Australia (CAL). In 1971, Mitsubishi Motors and Chrysler made a contract covering distribution, trademark and technical assistance in Australia, following the capital tie-up between both companies. Mitsubishi Motors started to build Mitsubishi vehicles in Australia. The share of Mitsubishi vehicles gradually increased as a portion of the total production of CAL; Chrysler also came into financial difficulty, and Mitsubishi Motors was asked to commit directly. So, Mitsubishi Motors, together with Mitsubishi Corporation, purchased almost all of the shares of CAL, and CAL became MMAL. MMAL started to manufacture the Magna, a model that was an Australia-exclusive modified version of Diamante, and it became a sales hit. Moreover, MMAL developed a derivative product, the Magna-based station wagon, by itself.

<u>Time division of the study target stages</u>: The environmental changes that took place in the Australian automotive industry after 1984 are considered in 2 stages, based on changes in Australia's industrial policies. (Table 8.5)

(1) Production Expansion Stage (1984-1992): Prior to 1984, protected by a protectionist industrial policy, local automobile manufacturers in Australia supplied high-cost passenger cars for domestic market.

However, a new industrial policy for automotive industry the "Button Car Plan" was announced in 1984. It aimed at a rationalizing of the model lineups and production systems of local manufacturers by encouraging competition. The ultimate goal of this policy was the improvement of the quality and productivity of local manufacturers and a reduction in car prices. In more detail, the government aimed to increase per-model production through reorganization of local manufacturers having each manufacturer expand its production scale and reduce the numbers of its model. Also the government opened local market slightly in order to encourage competition. By these policies, the government sought a way to help local manufacturers aimed

local manufacturers to survive in worldwide competition.

Local manufacturers (Ford Australia, GM Holden, TMCA, MMAL and Nissan Australia) had to cope with this new policy. The policy included a penalty for small-scale production of models, so the local firms struggled to form joint ventures and other form of inter-firm tie-ups, including OEM supply of each other (small and medium cars from Japanese firms, and large cars from American firms). As is mentioned later, TMCA and GM Holden (following, GMHA) formed a joint venture. At the same time, Ford Australia entered into a tie-up with Nissan Australia.

(2) Production Shrinkage Stage (1992-): After the "Button Car Plan," industrial policy towards the automotive industry changed first in 1988 and again in 1992. The stress of the policy gradually moved from strengthening the local industry to market liberalization. As a result, disadvantages began to exceed advantages gained by JVs and tie-ups, as the strategic freedom of each company was reduced. Thus, the agreements were gradually cancelled. Inter-firm tie-ups turned out to be a temporary measure against the "Button Car Plan". In 1991, Ford Australia and Nissan Australia ended their tie-up and Nissan withdrew from producing in Australia the next year though its casting plant and sales function remain.

MMAL's strategy for Production Expansion Stage: Initially, MMAL considered a tie-up with another local manufacturer, but could not find a partner that met its conditions. So, it became necessary for the firm to survive on its own.

MMAL stopped production of small car and concentrate its production on medium cars, a model which is exclusively sold in Australia. Because Australia was the biggest market of Diamante-based cars, Mitsubishi Motors concentrate their production to MMAL, excluding sedans sold in Japan, in order to maintain MMAL's production volume.

However MMAL did not do large investment for exportation, other than in its casting plant that sharply increased exports to Japan. MMAL managed to export by building its production level capability with the existing facility. Doing so caused disadvantages in quality and productivity, compared to building a new facility, but should exports not go well in the future, MMAL won't suffer in terms of its financial resources, in other words this strategic decision kept flexibility high.

TMCA's strategy for Production Expansion Stage: On the other hand, Toyota considered overseas relationship with GM in the US more than it considered the local condition. TMCA (mainly Australian managers) examined a deal with MMAL, but Toyota finally decided on a joint venture with GMHA, which had initially came out GM's request. Behind this JV, there lies the worldwide factor that Toyota had just entered into a joint venture in the U.S. with GM; New United Motor Manufacturing Inc. (NUMMI), as a the measure to avoid automobile trade conflict between Japan and the U.S.. In Australia, Toyota and GM established a holding company, United Australian Automotive Industries Ltd. (UAAI), with an equal investment of each. Both TMCA and GMHA became 100%-owned subsidiaries of UAAI. Both companies continued to operate individually, except that the provided vehicles to each other on an OEM

basis. However, any large-scale investments needed to get the partner company's approval.

TMCA supplied small and medium cars; the Corolla and Camry, to GMHA, and local demand eventually grew to exceed the capacity of the existing Port Melbourne plant. So, TMCA borrowed capacity from Dandenong plant, former GMHA plant, and transferred production of the Corolla there. However, because both plants were already rather worn-down (especially their painting facilities), TMCA decided to construct a new plant in Altona, where a press, engine, and transmission facilities had already been completed, as was mentioned above. TMCA concentrated almost all its production into its new plant and quality and productivity was dramatically improved. At the same time, TMCA pushed forward with a supplier-strengthening program (initiated in the early 1990s, with the Australian Government's support) and moved towards the making progress in the building of its production capability. As a result, the firm could gain competitive advantage over other local manufacturers. (See Fujimoto [1998] and Fujimoto [2000] for detail.)

MMAL's strategy for Production Shrinkage Stage: MMAL did not enter into any tie-ups with other local manufacturer in the Production Expansion Stage and little effect was caused by this decision. As MMAL had already decided, it continued its effort to expand exports and began started large-scale export from 1992. Most exported vehicles were sent to the United States. It also exported the Diamante Wagon to Japan.

Why could not MMAL start large-scale exports earlier? In fact, product quality obstructed this option. MMAL encountered various difficulties overseas, especially that for the United States, where Product Liability Act had been passed. Through MMAL's exhaustive activities to improve quality, the firm's manufacturing capability also improved.

However, MMAL did not financially invest largely in its facility. This strategic choice affects its production system. For example, the Magna's side panel was pressed only after it was divided into 2 parts, because of the small size of MMAL's press machine. The two parts then put together by welding. At most manufacturers, the side panel is pressed as one part.

TMCA's strategy for Production Shrinkage Stage: As has already been mentioned, TMCA had worked hard to improve its manufacturing capability. Table 8.6 shows that, given its production size, in 1996, TMCA was already by no means inferior in its cost to manufacturing facilities in Japan and the United States, where the Camry is manufactured.

TMCA ended the JV with GMHA in 1996, because of a decrease in demand for OEM vehicle and further liberalization of the Australian market. As OEM vehicles for GMHA came to be no longer needed, TMCA had to export in order to maintain its production volume. Because TMCA had already improved its manufacturing capability, Toyota announced its plan to start large-scale export from TMCA to the Persian gulf countries in 1996. In August 1997, TMCA completed a full model change of the Camry, and started large-scale exports to gulf countries. However, numerous problems with the quality of these exported vehicles occurred then. (Orihashi [2000a])

The first problem was with TMCA employees' understanding of the meaning of quality.

TMCA employees had the sense that all they had to do was to achieve Toyota's worldwide quality standard. On the other hand, in Japan, employees produced automotive that exceed that standard in accordance with *soi-kuhu* activities. Toyota dealers in gulf countries thought the difference between "made in Australia" and "made in Japan" was a problem in accordance with the condition mentioned above. The second problem was with a lack of skill on the assembly line. The third problem was the understanding of quality of consumers in gulf countries is stricter than that of Australian consumers. Due to the first and second problems, "made in Australia" did not fill the quality standard of the export market. The fourth problem was the inferior image for "made in Australia" vehicles. The fifth problem was development process. The Camry was a vehicle developed for worldwide, so its development was a joint project of Japan, the United States and Australia. Naturally the condition of TMCA's facility was not considered sufficient at the time of development and the model's minor change, because TMCA is relatively small in terms of scale. In fact, Japan and the U.S. played the main role in the product's development.

TMCA worked hard to overcome the problems above as follows. At first, TMCA formed a repairing team and sent them to the gulf countries. Before that, if an imported vehicle manufactured by a foreign subsidiary of Toyota happened to be defective, the local dealer would repair it and claim the cost of repairs to the subsidiary. Moreover, inspection personnel of local dealers in the gulf countries went to Australia at TMCA's expense, and started inspections of vehicles before they were shipped. This project continued until the quality reached a sufficient level. At the same time, TMCA raised the awareness of its employees' sense of quality to regard the local dealers' request as the standard to be reached. Of course, building mutual trust between TMCA and the local dealer was the key solution. As for the development process, Toyota now promotes technical communication between the three countries more than in the past.

The problem outlined above caused a change in Toyota's attitude toward international business. Prior to this experience that it was wasteful for each foreign subsidiary to have the function of export market relations. As a result, headquarters in Japan performed this function. However, after this problem, as an individual company, TMCA has sent an Australian manager to Middle East for ongoing communication with local dealers, in order to prevent new problems from surfacing. Also, in the Thailand case, TMT sent a Thai manager to TMSA (Toyota's Sales company in Australia), in order to cope with the possibility of quality problems with the Thailande Hilux.

By these efforts, TMCA achieved the capability to maintain the necessary high quality standard, one that is superior to other manufacturers in Australia. TMCA exported more than 30,000 vehicles in 1998. From this it can be inferred that TMCA has achieved in a short period the capability needed to export, by engaging in the activities we mentioned above.

<u>Summary</u> (<u>Toyota and Mitsubishi Motors in Australia</u>): As is outlined above, in the Australian Automobile industry, patterns of firm behavior that match the framework and hypotheses of this paper can be found, though not as clear as that in Thai Automobile industry.

Facing a local crisis, that forced an increase in production per model and followed by a change to liberalization as regulated by the Australian Government, Toyota, a "large competent

firm with a high dynamic capability", viewing its relationship with GM more important than the domestic circumstances, formed a joint venture with GMHA. This strategy itself was not simple correspondence, but as a result, TMCA came to provide small and medium car to GMHA and have local demand that exceeded the capacity of its existing plant. So, TMCA borrowed former GMHA plant at first, and then constructed in Altona a new assembly plant. As a result, TMCA expand its local-oriented production, though not intended at first. Needless to say, in the background of this, there lies Toyota's financial resources that were maintained despite economic sluggishness in Japan.

However, due to the rapid increase of imported cars and cancellation of the joint venture with GMHA, TMCA had to change its strategy toward the expansion of exports in order to maintain its operations. This was a great challenge for TMCA, but thanks to the dynamic organizational capability against unexpected environmental changes that is possessed by Toyota, TMCA could manage to start large-scale exports to the Middle East in a relatively short period of time.

We cannot conclude whether or not TMCA will be able to survive in the long run, but at least, it is a fact that the international competence of TMCA has made rapid progress through the sequences of its efforts for export expansion.

On the other hand, Mitsubishi Motors, a "small competent firm", selected a strategy that maintained its local production through the expansion of exports. A tie-up with other local manufacturer was not realized, so MMAL attempted to survive alone. MMAL concluded that it could not maintain 2 models, because it was only the 4th or 5th largest manufacturer in Australia. So, MMAL concentrated its production on one model (Magna), and began the large-scale export of it, in the pursuit of further scale merits. Because the largest market of the model was Australia, Mitsubishi Motors transferred most of its production from Japan to MMAL. Aided by this decision, MMAL completed its transfer into an "export-oriented plant".

As compared with TMCA, MMAL started its efforts to become an "export-oriented plant" earlier, and MMAL managed to maintain its operation without a large investment in its production facility. The firm's measures in response to the increase of import car were relatively softer in comparison with TMCA.

As has been discussed, the strategic reactions of the Japanese automotive manufacturers in Australia toward the change of industrial policy were emergent in nature. This phenomenon became a little confusing with the tie-ups between MNEs, however it is basically consistent with Hypothesis 1, 2, and 3; and the large company at first expands its local-oriented production and changes its attitude towards export-oriented after the crisis; and the small company was export-oriented from the beginning and continue to expand its exports after the crisis.

7 Conclusion

In this paper, to address the question of why the foreign manufacturing subsidiaries of MNEs from the same home-country sometimes pursue different strategies in the same host country, we have proposed a conceptual framework that takes into consideration the differences

in scale and organizational capability of each MNE. Then, as an example that shows the remarkable differences in organizational action that can be observed in the subsidiaries of MNEs from the same home-country, we examined the strategy of two Japan-originated automotive MNEs in Thailand and Australia, especially measuring the firms' resilience against a crisis in the local subsidiary, the crisis being caused by such external shocks as a regional economic crisis or a rapid increase in imported cars, etc. Through this paper's research, we examined whether our conceptual framework is consistent with these cases.

Needless to say, definitive conclusions cannot be drawn from the case studies of only one industry in two countries. However, it is possible for us to say that we could obtain practical results that are consistent with the conceptual framework and the hypothesis we propose; differences in scale (financial resources) in the home country, manufacturing organizational capability and dynamic organizational capability affect the selection of the type of local manufacturing subsidiary, local product and the marketing of the local product as well as the measure of a firm response following a crisis. Furthermore, these relationships were found to hold both in the Production Expansion Stage and the Production Shrinkage Stage. It is the main conclusion of this research that the conceptual framework we propose contributes to the body of research on MNEs by shedding additional light on the strategic behavior of MNEs in the 1990s when the global economy started to change rapidly. While respecting the existing conceptual framework of the theory of MNE and international business, we insist that the individuality of each MNE, for example differences in scale and organizational capability, must be considered more seriously when analyze MNEs.

This paper is an exploratory study based on only a few cases, so there still remain numerous questions to address. We must study the possibility of generalizing this conceptual framework and hypothesis by expanding the research scope. Can strategic differences of MNEs based on scale and organizational capability be observed in Toyota and Mitsubishi Motors in countries other than Thailand and Australia? Can the framework be applied to other automotive MNE? Moreover, can consistent findings be obtained in industries other than automobile industry? Will we be need to develop our study in the future to include hypothesis testing by introducing statistic analysis? Of course, we must also continue to examine critically the conceptual framework itself, whether scale, static capability and dynamic capability, as this study showed, are enough to explain the differences in the strategic behavior of firms.

While many questions, such as those outlined above, remain, we believe the concepts introduced here of "uniqueness of each firm", "dynamics" and "emergence" enrich the analysis of manufacturing MNEs, and may be appropriate to some extent. Our conceptual framework has also made a contribution to the literature in explaining some important cases of the strategic behaviors of Japanese MNEs in the automobile industry that were most active in overseas direct investment in the second half of 20^{th} century.

Note

The field research by Professor Takahiro Fujimoto took place at Toyota Australia in 1995. The field research by Shinya Orihashi took place at Mitsubishi Australia and Toyota Australia in

October 1997 and at Toyota Thailand and MMC Sittipol (a subsidiary of Mitsubishi Motors) in June 1999. Orihashi visited MMC Sittipol again in November 2000. The two authors have also visited the Japanese headquarters of both companies. They are grateful for the corporation of Toyota and Mitsubishi Motors in this research. The authors would also like to acknowledge the cooperation and suggestions provided by Professor Yveline Lecler of Lyon University and Mr. Daniel Heller, a graduate student at the University of Tokyo.

References

- Abo, T. (ed.) (1994) *Hybrid Factory: Japanese Production Systems in the United States*, New York: Oxford University Press.
- Andrews, K.R. (1971) The Concept of Corporate Strategy, Dow Jones-Irwin.
- Bartlett, C.A. and S. Ghoshal (1989) *Managing Across Borders: The Transnational Solution*, Harvard University Press.
- Clark, K.B. and Fujimoto, T. (1991) *Product Development Performance: Strategy, Organization, and Management in the World Auto Industry*, Harvard University Press, 1991.
- Fujimoto, Takahiro (1997) Seisan Shisutemu no Shinkaron [The Theory of the evolution of production systems], Tokyo: Yuhikaku, (in Japanese).
- Fujimoto, Takahiro (1998) *Toyota Motor Manufacturing Australia in 1995: An Emergent Global Strategy*, Discussion Paper, Faculty of Economics, The University of Tokyo.
- Fujimoto, Takahiro (1999) 'Sohatuteki guroubaru senryaku osutoraria jidousha sangyou no jirei kara [Emergent Global Strategy: A Case of the Australian Automobile Industry] ', *Annals of the Society for Industrial Studies, Japan*, No. 15, pp. 25-38 (in Japanese)
- Fujimoto, Takahiro (1999) *The evolution of a manufacturing system at Toyota*, New York: Oxford University Press.
- Ghoshal S. and Nohria N., 'Internal differntiation within multinational corporations', *Strategic Management Journal*, 1989, Vol.10, pp. 323-337.
- Ghoshal S. and Nohria N. (1993), 'Horses for Courses: Organizational Forms for Multinational Corporations', *Sloan Management Review*, winter, pp. 23-35.
- Hofer, C.W. and Schendel, D. Strategy Formation: Analytical Concepts, West. 1978.
- Hymer, S. (1976), *The International Operation of National Firms, -A Study of Direct Investment*. Industrial Commission (1997), *The Automotive Industry*, Canberra: pp.58
- Mintzberg and Water (1985) 'Of Strategies, Deliberate and Emergent', *Strategic Management Journal*, Vol.6: 257-272.
- Nelson, R.R., and Winter, S.G. (1982) An Evolutionary Theory of Economic Change, Belknap.
- Knickerbocker, F.T. (1973) Oligopolistic Reaction and multinational Enterprise, Harvard Business School Press.
- Nohria N. and Ghoshal S. (1994) 'Differentiated fit and share values: Alternatives for managing headquarters-subsidiary relations', *Strategic Management Journal*, Vol. 15: 491-502.
- Orihashi, Shinya (1998) A Research about Strategy Formulation Process in Multinational Enterprises: The case of Australian Automotive Industry, Master's Degree Thesis, Graduate School of Economics, The University of Tokyo (in Japanese).

Orihashi, Shinya (2000a) 'Breaking from Import-Substituting Plant to Export-Oriented Plant, The case of Japanese Automotive Makers in Australia and Thailand', *The Journal of Asian Management Studies*, Vol.6, Japan Scholarly Association for Asian Management: pp.97-102 (in Japanese)

- Orihashi, Shinya (2000b) 'Plural patterns of international strategy in the same industry, the case of Toyota and Mitsubishi Motors in Thailand and Australia', *The Annual Bulletin Japan Academy of International Business Studies*, No. 6: pp.238-249 (in Japanese).
- Penrose, E.T. (1959) The Theory of the Growth of the Firm, Basil Blackwell, Oxford.
- Porter, M.E. (1985) Competitive Advantage: Creating and Sustaining Superior Performance, Free Press.
- Rugman, A.M. and Verbeke, A. (2001) 'Subsidiary-specific Advantages in Multinattional Enterprises', *Strategic Management Journal*, Vol.22: 237-250.
- Sugiyama, Y. and Fujimoto T. (2000) 'Product Development Strategy in Indonesia: a Dynamic View on Global Strategy', Humphrey, J., Lecler, Y. and Salerno, M.S. (ed.) *Global Strategies and local Realities, The Auto Industry in Emerging Markets*, GERPISA, 2000.
- Taggart, JH (1998) 'Strategy shifts in MNC subsidiaries', *Strategic Management Journal*, Vol. 19, 663-681.
- Teece, D. J., Pisano, G. and Shuen, A. (1992) *Dynamic Capabilities and Strategic Management*, University of California at Berkeley Working Paper.
- Womack, et al. (1990) The Machine that Changed the World, Rawson Associates.
- Vernon, R. (1971) Sovereignty at Bay; The Multinational Spread of U.S. Enterprise, Basic Books.

Figure 8.1 Analytical Framework

operational capability	Relatively high	Relatively low
firm size		
Relatively large	Large competent firm (Dynamic capability) = high/low	Large incompetent firm
Relatively small	Small competent firm (Dynamic capability) = high/low	Small incompetent firm

Table 8.1 Analytical Framework (Environmental Side)

	INITIALLY	PRODUCTION EXPANSION STAGE	PRODUCTION SHRINKAGE STAGE	
	•Local market is limited.	•Stronger local market or government's policy stimulate Local market gets weaker.		
CONDITIONS	•Importing is very difficult, due to	firms to increase production volume.	← Due to an economic crisis or an increase in	
	government policy.		imported cars	
		· Local sales are still not sufficient for competitive		
		volume, so they concentrate worldwide production of a		
	·Local sales network is relatively	specific model to the plant.		
	weak.	···The mission of the plant changes, but new investment	Already started to export to various countries	
SMALL COMPANY	• Import-substituting plant	is limited, due to firm's financial constraints.	→Already achieved the capability to compete in	
	•Not exporting at a. large-scale.	• Must begin exporting at a. large-scale to various many types of markets worldwide.		
countries.				
		→Capability-building start.		
			•Now they have to begin exporting at a. large-scale to	
	•Local sales network is strong.	•Increased local sales force the constructing of a new maintain their operation.		
LARGE COMPANY	 Import-substituting plant 	local-oriented plant.	→Capability-building start.	
	•Not exporting at a. large-scale.	•Still not exporting at a. large-scale.	•The main mission of the plant is still local-oriented.	
			→The scope of exports is limited.	
			···Due to the international division of production.	

Table 8.2 Toyota and Mitsubishi Motors in Thailand

	MMC Sittipol	Toyota Thailand	
Started production in			
Thailand	1966	1964	
Capital (Million Bahts)	834	4,520	
		Toyota 69.60%	
Shareholders (Japanese)	Mitsubishi Motors 46.23%	TABT15.5%, Siam Cement10%,	
(Thai)	MHTC52.04%, Lee Group1.73%	etc.	
Employees (2000)	2,945	4,041	
Japanese Nationals			
(2000)	36	35	
Thai Directors(1999)	6	4	
Sales (1999, Million			
Bahts)	39,038	46,445	
Annual Production			
Capacity	136,000	240,000	
Pick-up exports to	90 countries other than North America	Australia, Cambodia,	
	(Mainly South Europe and Australia,	Philippines, Laos	
	No export to North America.)		
Models			
Passenger Car (Sedan)	Lancer	Camry, Corolla, Soluna	
Commercial Car	Strada (pick-up), Canter		
	(medium-size truck), Fighter (king-size	Hilux 4/2 (pick-up), Dyna	
	truck)	(truck)	

Source: JAMA, Firm Interviews in June 1999 and November 2000

Table 8.3 Analytical Framework (Environmental Side) --- Thailand

	INITIALLY	PRODUCTION EXPANSION STAGE	PRODUCTION SHRINKAGE STAGE	
		(Early 1990-1996)	(Mid 1997-)	
	•Local market is limited.	·Stronger local market force them to increase their	Local market gets weaker.	
CONDITIONS	•Importing is very difficult, due to	production volume.	←Due to Asian Economic Crisis.	
	government policy.			
		•A new plant is built in addition to the existing plant,	· Already started large-scale export to various	
	Local sales power is relatively	• Local sales power is relatively and a concentration of worldwide production of 1-ton countries.		
weak. pick-up trucks.		pick-up trucks.	→Already achieved the capability to face many	
Mitsubishi Motors	• Import-substituting plant	···The mission of the plant changes. But investment is types of markets worldwide.		
	•Not exporting at a. large-scale.	limited by outsourcing plant operations to suppliers.	•Shutting old plant and concentrate its production i	
		•Starting to export at a. large-scale to various countries.	new plant.	
		→Capability-building starts.		
			•Now have to begin large-scale export to maintain	
		•Increased local sales stimulate the construction of a operation.		
	•Local sales power is strong.	new local-oriented plant.	→Capability-building starts.	
Toyota	 Import-substituting plant 	•Start to build an ASEAN specific model (Asian Car) in	• The main mission of the plants are still	
	•Not exporting at a. large-scale.	Thailand.	local-oriented.	
		•Still not exporting at a. large-scale.	→The scope of their export is limited to Oceania.	
			···Due to the international division of production.	

Table 8.4 Toyota and Mitsubishi Motors in Australia

Table 8.4 Toyota and Wittsubishi Motors in Austrana				
Mitsubishi Australia	Toyota Australia			
73.98	481			
Mitsubishi Motors (Japan) 60%	Toyota Japan 100%			
Mitsubishi Corp. (Japan) 40%				
2075 (estimate 1997)	3900(1996)			
Approx. 12.000 Vehicles (1996)	Approx. 14000 Vehicles (1996)			
CBU to U.S.A., Japan, New Zealand,	CBU and KD to Persian Gulf countries.			
etc.	New Zealand, etc.			
Casting product to Japan	Some auto parts to ASEAN, South			
	Africa, etc.			
Important overseas location for sales	Medium size oversea location for			
and production, much the same as the	production in Toyota's global Network			
U.S., Thailand, and the Netherlands				
Changed from two models to one	Camry and Corolla			
model (Magna)				
Approx. 75%	65% to 70%			
Investments for Model Change and	Construction of new plant, Factory			
Rationalization	reorganization			
5,400(Japanese nationals 18)	4,220(Japanese nationals 20)			
Australian	Japanese			
	Mitsubishi Australia 73.98 Mitsubishi Motors (Japan) 60% Mitsubishi Corp. (Japan) 40% 2075 (estimate 1997) Approx. 12.000 Vehicles (1996) CBU to U.S.A., Japan, New Zealand, etc. Casting product to Japan Important overseas location for sales and production, much the same as the U.S., Thailand, and the Netherlands Changed from two models to one model (Magna) Approx. 75% Investments for Model Change and Rationalization 5,400(Japanese nationals 18)			

Source: firm interview in October 1997

Table 8.5 Analytical Framework (Environmental Side) --- Australia

	INITIALLY	PRODUCTION EXPANSION STAGE (1984-1995)	PRODUCTION SHRINKAGE STAGE (1996-)	
	•Local market is limited.	•Government's new policy (Button Car Plan) forces local	Local market gets weaker.	
CONDITIONS	•Importing is very difficult, due	suppliers to increase production volume.	←Due to an increase of imported cars, because of the	
	to government policy.	←Minimum production volume (per model) regulation.	government's policy has changed to liberalization.	
		*Local sales is still not enough to reach the minimum		
	·Local sales power is relatively	volume, so worldwide production of Magna (Diamante)		
	weak.	is concentrated to the plant. (Except sedans sold in Japan)	•Have already started to export to various countries	
Mitsubishi Motors	• Import-substituting plant	···The mission of the plant changes. But their investment	→ Have already achieved the capability to face many	
	•Not exporting at a. large-scale.	is limited. = Not building a new plant.	types of markets worldwide.	
		• Starting to export at a. large-scale to various countries.		
		→Capability-building starts.		
			•Tie-up with GM Holden ends	
		•Increased local sales (including OEM for GM Holden)	→ Have to begin exports to maintain the operation.	
	•Local sales power is strong.	force it to construct a new local-oriented plant.	→Capability-building starts.	
Toyota	• Import-substituting plant	→Make remarkable progress especially in productivity	• The main mission of the plants are still	
	•Not exporting at a. large-scale.	improvement.	local-oriented.	
		• Still not exporting at a. large-scale.	→The scope of export is limited.	
			···Due to the international division of production.	

Table 8.6 Australian, United States and Japanese Parts Costs for Toyota Camry (Japan=100)

Commodities	Australia	United States	Japan
Coil spring	116	86	100
Outer mirror	112	94	100
Seat belts	109	73	100
Lamps	105	80	100
Tires	105	91	100
Glass	101	89	100
Average of all commodities	106	96	100

Source: Industrial Commission, *The Automotive Industry*, 1997, pp.58