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Author(s): Stephen B. Tallman

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STRATEGIC MANAGEMENT MODELS AND RESOURCE-BASED STRATEGIES AMONG MNEs IN A HOST MARKET

STEPHEN B. TALLMAN
Graduate School of Business and College of Business, University of Utah, Salt Lake City, Utah, U.S.A.

This article develops a resource-based strategic management model of MNE market entry. Strategic groups of firms in the U.S. foreign auto industry are derived empirically and tested for their ability to explain structural and performance results in one industry and one host country under the assumptions of the model.

The current theoretical and empirical literature concerning the development and performance of multinational enterprises (MNEs) is dominated by two perspectives. One is the strategic behavior (Kogut, 1988) or market power perspective, which is largely an international extension of concepts from industrial organization (IO) theory. The second viewpoint, which Kogut calls the transaction cost explanation, encompasses several specific models, but has become focused on institutional economics theory (Williamson, 1975). The debate among partisans of these models of the MNE and its decisions and activities is as vociferous as that among rival strategy theorists (Casson, 1987; Donaldson, 1990). Attempts to combine the two theories into an eclectic model (Dunning, 1988), have met partial acceptance but do not provide a unified perspective. This paper shows that a third model of competitive strategy, the resource-based strategic management (SM) model, provides a rich interpretation of MNE activities and provides compatible roles for the major considerations of the IO and transaction cost (TC) perspectives. Explicit use of the SM model in an international setting also illustrates the potential for active association of competitive strategy theory and models of the MNE.

This article demonstrates how the concepts of a resource-based model provide insights on the host country operations of multinational firms. It begins with a description of the SM perspective, focusing on those aspects which are particularly relevant to MNEs. The second part describes specific expectations about the host country strategy–structure–performance relationship derived from an SM perspective. The third part of the paper provides empirical tests which examine the power of the strategic model as an explanation for the host country activities of foreign MNEs in one industry and one host country market, and which successfully relate strategy, structure, and performance for this sample.

THE SM MODEL AND THEORY OF THE MULTINATIONAL FIRM

The strategic management model of competition is the result of attempts to expand economic models of competition. Nelson and Winter (1982) reject traditional static models of competition in which outcomes are predetermined by exogenous conditions and by the requirement for optimizing goals. They recommend that behavioral and organizational theory considerations be brought

into the analysis of competitive strategy. The SM model of the firm provides such a dynamic, non-optimizing, and efficient model of competitive strategy. It also provides answers to some of the weaknesses in the IO and TC perspectives on the MNE described by Calvet (1981) and Kogut (1988).

Resource-based models of strategy have been developed by Rumelt (1984), Wernerfelt (1984), Barney (1986), Nelson and Winter (1982), and others. The strategic management model of strategy derives from the strategy–structure–performance model of Chandler (1962). It has economic roots in the monopolistic competition model of Chamberlain (1933), the entrepreneurial economics of Schumpeter (1934), and Williamson's (1975) institutional or transaction cost economics. The model is given a non-economic perspective by incorporating certain sociological models of the organization. These include population ecology (Hannan and Freeman, 1976), resource dependency (Pfeffer and Salancik, 1978) and managerial discretion (Romanelli and Tushman, 1986).

In contrast to IO-based models of the MNE, such as the models described by Knickerbocker (1973), Graham (1974), Caves (1971), and Porter (1986), competition in the SM model is based on firm-specific strategies rather than oligopolistic collective action. Industry structure is not treated as an independent condition awaiting discovery, but as the outcome of firm-level competition. Strategies are devised as firms attempt to identify, protect, and exploit their unique skills and assets, or firm-specific resources (FSRs), in order to gain competitive advantage in the marketplace. Extraordinary profits result from combinations of strategy and structure which efficiently exploit FSRs within a particular environment. As the environment changes, firm-level strategy and structure must also change to fit the new conditions. Profits are protected from erosion by firm-specific isolating mechanisms which make imitative strategies uncertain of success, rather than by collectively supported entry barriers (Rumelt, 1984). An example of an isolating mechanism relevant to MNE models is the tacit nature of some organizational knowledge, used by Kogut (1988) to introduce an organizational perspective on international joint ventures.

The cost efficiency of internal markets is said to be adequate to explain direct foreign investment (DFI) and the existence of MNEs from the transaction cost perspective. Transaction cost economics can provide a theoretical justification for the MNE without the market distortions of oligopoly models (Casson, 1987; Buckley, 1988; Teece, 1986; and Hennart, 1982). However, transaction cost theory is an economic theory of organizational structure, not strategy. This theory relies on technological or economic determinism to dictate efficient firm structures under static conditions.

The SM model of the firm has antecedents in institutional economics, as do transaction cost based models of the MNE. However, strategic management explicitly differentiates strategic intention and structural efficiency, in contrast to the TC perspective. Strategic management provides a change mechanism by emphasizing the importance of managerial discretion (Romanelli and Tushman, 1986), while retaining a role for structural efficiency as a source of competitive advantage. Strategic management integrates strategic behavior and structural efficiency in a unifying model. In relation to the operations of MNEs, this integrated approach suggests that both strategic intent and economic efficiency may be important to market entry decisions. Strategy focuses on initiating decisions, while transaction costs are most accurately seen as contributing to the design and subsequent performance of resulting organization structures. Managers must make choices, but these choices can only be tested when exposed to the competitive environment in the host country.

EXPECTATIONS IN THE HOST MARKET CONTEXT

The previous section describes the advantages of an SM perspective on the MNE in general terms. This section addresses specific expectations for the activities of MNEs in a host market. The transition from the general to the specific illustrates the SM model and provides a specific conceptual basis for the empirical section to follow. The host market structural entry, or internalization, decision is the focus of this section.

The strategic management (SM) model suggests that each MNE will evaluate its unique skills and assets to develop a firm-specific strategy for any particular host market. This strategy and relevant sources of competitive advantage are considered in the context of the host country's unique demands to generate a best apparent structure or level of internalization. The choice of strategy guides decisions about resource allocation, governance structure, environmental interaction, and so on. For the MNE the key strategy choice would involve determining which product(s) should be offered in which market segment(s) of which foreign market(s).

For an MNE contemplating a new strategy, its existing resource base, and particularly its inventory of resources proven to generate rents in the past (the FSRs), will limit the range of strategic possibilities considered in any situation. Even an entrepreneurial strategy will be influenced by proven rent-producing value for certain resources. For instance, an MNE may enter a new foreign market, an innovative step, but use proven strategies and structural forms to reduce its uncertainty in that market. Strategies and FSRs interact to generate competitive advantage for the firm. Only those FSRs which are compatible with the characteristics of a given market are likely to generate economic rents, and to be influential in initial strategy selection. However, after entry and a period of operation in any market, new FSRs may develop in the host market which were not among the original set of parent resources, and which may not be available outside of that market. These market-specific FSRs will have an impact on subsequent strategic choices in that market. Such resources as a host country dealer network may fit in this set.

Traditional models of MNE strategy suggest that international firms use similar structures in all host markets in response to industry or sub-industry imperatives. Real MNEs have varied structures in different markets (Bartlett and Ghoshal, 1989). The level of internalization of international transactions can only be chosen in relation to a particular part of the environment, as each national market provides location factors, and after consideration of the resources and strategies to be employed in a given market.

As the MNE expands into the international marketplace it selects structural forms to support its new strategic scope, in much the same way that a product-diversifying firm selects a multi-divisional structure to support its new product scope. These structural forms then become part of the resource structure and influence future strategic decisions. A market type structure may trade in products, via exports, or in ideas, via licensing. An internalized structure uses some form of DFI to increase the potential for controlling the execution of strategy and the application of the critical resources.

An MNE's structural decision for a single host market focuses on the level of internalization to be used in that market. This decision is based on the need for a governance structure to best fit the firm's market strategy and FSRs to the environment. Teece (1986) discusses choice of governance structure in his transaction cost model, but as a direct response to cost factors, ignoring the intermediary role of managerial strategy.

Strategy, not efficiency, is the basis for the initial entry decision. As firms compete, however, they will observe greater and lesser levels of performance. Cost efficiency, including efficiency in transaction costs, is a major part of the performance feedback to managers. Outstanding performance will perpetuate the chosen strategy and structure. Lesser performance will eventually result in adaptation. Adaptation often involves the imitation of strategies and/or structural forms of competitors (DiMaggio and Powell, 1983). The competitive advantages of firms are never identical, due to the complex interactions of skills, managerial discretion, and location factors, so perfect imitation is not possible (see Lippman and Rumelt, 1982). Therefore, even within a closely defined group of MNEs, we expect to observe variations in strategic aims, internalization structures, and performance levels in host markets. In the SM perspective we would expect that higher performance will result from a more effective fit of strategy, structure, and environment for an individual firm in relation to its competitors.

In simplified essence, the IO model suggests that only market position in an industry is a significant input to the MNE's internalization decision and subsequent performance. TC models consider the characteristics of the MNE's industry and the requirements of location as relevant to the internalization decision. The SM model

considers strategy and resources as factors which are specific to the firm, not the industry. The fit of strategy and resources, in conjunction with location, is important to the choice of internalization level in a host country, and the fit of all strategic and structural factors influences performance results.

AN EMPIRICAL EXAMINATION OF THE SM PERSPECTIVE

In this section the SM perspective on internalization and performance is examined in an empirical study of MNEs in one host country market. This section suggests and tests specific hypotheses related to the concepts developed above. It is organized into sections relating to the sample, the role of strategy, the strategy–structure relationship, and the determinants of performance. For clarity, hypotheses are developed and tested, and the results described, at each stage of the empirical analysis.

The sample

The foreign automobile industry in the United States during the 12 years 1974 through 1985 is the sample industry in this study. This industry is appropriate in that it provides a mix of export and direct foreign production among member firms. The auto industry reflects the increasing importance of global sales and production by firms from the industrial triad of nations (Japan, North America, and Western Europe), and the changing role of the United States as a site for foreign investment. It is typical of 'globalizing' heavy industries and the subject of much speculation on the changing role of multinationals in the modern world. Foreign automobile firms with sales in excess of 10,000 units in at least 1 year of the study are included (Table 1).

The article compares the strategies and performance levels of those firms which *do* invest in direct foreign production (DFP) and those which *do not*. Most studies of DFP have compared levels of DFP across industries, making firm-level comparison impossible. Many studies of DFP also focus on industry-specific variables (Buckley and Casson, 1976). This article will focus on firm-specific variables, as does SM theory and strategy-oriented empirical research,

Table 1. The foreign automobile firms

Europe	Japan
Volkswagen–Audi–Porsche	Toyota
Mercedes	Nissan
BMW	Honda
Fiat	Subaru
Jaguar (British Leyland/BL)	Mitsubishi
Renault	Isuzu
Peugeot	Mazda
Volvo	
Saab	

and will control for industry differences by examining a single industry. Host location-specific effects on DFP are avoided by using one host country, the United States. Home country differences are expected to influence the resources which firms can employ in the host country, and, therefore, the host country strategy.

Strategy

Since establishing the relevance of firm-level strategy to decisions about structural issues and firm performance is key to the article, the empirical study begins by identifying strategic configurations (Miller and Friesen, 1984) among the firms in the sample. Casson (1987) and Buckley (1988), writing from the TC viewpoint, indicate that factors of competitive advantage are superfluous to the decision to use internal transactions. However, the existence of firm strategies is critical to both the IO (Porter, 1979) and the SM (Cool and Schendel, 1987) perspectives. Identification of specific strategies among the firms in the foreign auto industry indicates that managerial decision-making is significant in the industry, and implies that exogenous forces and efficient structures alone do not determine the results of competition.

Most recent empirical studies identify strategic configurations by using strategic grouping concepts (see Thomas and Venkatraman, 1988). Groups of firms are interpreted as representing firms with common strategic positions. Hatten and Hatten (1987) find that groups preserve information which would be lost at industry levels of aggregation while providing a wider range of variation by which to test a particular strategy. In the SM model, groups reflect gradually

improving imitations of successful strategies rather than the artificial mobility barriers of the IO model (Caves and Porter, 1977).

Groups are typically established in empirical studies through multivariate analysis. Cool and Schendel (1987) suggest that strategic studies must at least address issues of business scope and issues of resource commitment to be considered complete. The variables must also be relevant to the industry under study, and available to the researcher. In this study the previously hypothesized interaction of FSRs and strategy permits us to derive firm-level strategies from analysis of a set of resource-oriented variables. In an historical study, actual strategic choices are seldom preserved, while commitments of resources and market position can be identified from statistics. Some of the variables used here (Table 2) are suggested by Rader (1980), who proposes the existence of strategic groups in the industry. Others are derived from extensive study of the industry and are selected as relevant to market strategy and resource commitments on the part of the sample firms.

Time sensitivity

The data provide a three-way matrix (firms x variables × years) which can be subjected to three-way component analysis (Kroonenberg, 1983). The version of three-way analysis which is most accessible with these data is extended

singular value decomposition (SVD) Three-way analysis permits inferences to be made from time-series data which would be lost in averaging techniques.[1] The twelve firm × variable matrices for the years 1974–85 are each subjected to singular value decomposition. A sample split into 1974–79 and 1980–85 pools provides the best fit for the regression lines of the first three core matrix diagonal elements over time (Table 3). This result suggests that the industry faced two distinct contextual periods during the time studied, and that further analysis of the relation-

Table 3. Timewise regressions of the SVD core elements

Dummy value	Core element	F	$p > F$	R^2	Fcomp
None	CE1	5.436	0.040	0.352	—
	CE2	0.184	0.679	0.018	—
	CE3	0.746	0.588	0.069	—
1974–78 = 0, 1979–85 = 1	CE1	13.078	0.002	0.831	11.34***
	CE2	1.109	0.401	0.294	1.56
	CE3	2.953	0.098	0.525	3.84
1974–79 = 0, 1980–85 = 1	CE1	8.674	0.007	0.765	7.03**
	CE2	6.689	0.015	0.715	9.78***
	CE3	4.283	0.044	0.616	5.70*
1974–80 = 0, 1981–85 = 1	CE1	5.830	0.021	0.686	4.25
	CE2	0.188	0.902	0.066	0.20
	CE3	1.531	0.280	0.365	1.86

***$p > F$ <0.01; **$p > F$ <0.025; *$p > F$ <0.05.
Fcomp $= [(R^2_{dummy} - R^2_{w/o\ dummy})/2]/[(1-R^2_{dummy})/(n-(k+1))]$ where $n = 12$ and $k = 3$ for the regression:
CE $= B_0$dummy $+ B_1$year $+ B_2$dummy × year

Table 2. The grouping variables

NOMOD	Number of models in the U.S.	(S)
NOSEG	Number of market segments served in the U.S.	(S)
DLR	Number of dealerships in the U.S.	(R)
ENG	Engineering/performance quality	(R)
REL	Reliability	(R)
POPR	Price of the most popular model in the U.S.	(S)
NOMS	Number of models offered per segment in the U.S.	(R)

(R)—Resource commitment variable: these variables describe the intensity of the firm's strategic commitment to a particular aspect of strategy. NOMS, for instance describes how intensively a firm focuses on its chosen segments.
(S)—Strategic scope variable: these variables address the range of market segments addressed by a firm and the positioning of these segments in the overall market.

[1] Singular value decomposition generates a core matrix which relates the matrices of component loadings of the firms and the variables as follows:

$$Z = GCH'$$

Where Z is the input observation × variable matrix, G is the matrix of subject component loadings, C is the (diagonal) core matrix, and H' is the transpose of the variable component loading matrix. In an extended core matrix, the 'firm × variable' core matrices for all years are assembled as a series of yearly slices and the time dimension is not reduced. The diagonal elements of the extended core matrix can be examined for changes over time to identify changing relationships between the firms and the strategic variables. In this case the first three diagonal elements were selected as the core elements representing the significant components of the firm and the variable reduced forms.

ships of the firm and variable components should be conducted on a split sample. We note that this discontinuity is associated with the 1979 oil crisis, which resulted in much higher foreign car sales in the U.S. Cool and Schendel (1987) suggest that such an association with a real event verifies the dry results of statistical analysis of time-wise data.

Strategic groups

IO models (Caves and Porter, 1977) treat groups as homogeneous collections of firms protected from new entry by artificial mobility barriers. In the SM model, groups represent firms pursuing strategies in imitation of successful entrepreneurial firms that represent 'ideal types.' Such groups should be heterogeneous, with firms showing various degrees of commitment to an ideal strategic form (Lawless, 1987).

Lawless suggests that Q-type factor or component analysis can identify the heterogeneous groups which are to be expected under the assumptions of the SM model.[2] Q-type components are interpreted as 'ideal firms,' or archetypes by which real firms can be described, by Kroonenberg (1983). This interpretation is compatible with the SM theoretical perspective on strategic groups. Firms which load heavily on one component approach the strategic ideal. Other firms take a more balanced approach (heterogeneous strategy) and load on several components in a balanced fashion. In McKelvey's (1982) terms, groups of such firms can be conceptualized as polythetic, with many attributes, most of which are shared by most of the members, but none of which are equally present in all cases. As a test of the SM perspective on strategic groups among sample firms, we expect the following to be true:

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[2] The core matrix from a singular value decomposition relates the component loading matrices of an R-type (variable) component analysis and a Q-type (observations) component analysis of the same data (Kroonenberg, 1983). Strategic group analysis has used both of these loading matrices to form groups (see Thomas and Venkatraman, 1988 for an extensive review of the empirical literature). Galbraith and Schendel (1983) use component or factor scores of the observations on the R-type components to distinguish groups through two-stage cluster analysis. Miller and Friesen (1984) use the loadings of the observations on Q-type components to describe strategic groups or 'configurations.'

Hypothesis 1:   The firms in the sample should form heterogeneous strategic groups.

Testing

Within each pool of observations, variable scores are standardized, then Q-type principal-component analysis is performed using the covariance matrix. Three significant components are retained, consistent with the choice of three core matrix values for the time-wise analysis of the SVD matrices in determining stable contextual periods.

The loadings of each firm on the significant 'ideal firm' components within each pooling period are averaged to eliminate short-term variation. The average loading profiles on the three significant components are subjected to k-means type cluster analysis to determine if these 'strategic vectors' form groups. Three distinct clusters are identified in each time-series pool (Table 4). These clusters are interpreted as groups of firms with distinct strategic configurations (Miller and Friesen, 1984). One-way ANOVA of the firm loadings on each of the components by group identification shows significant F-scores in all cases, implying real differences between groups. Despite the different component loading schemes in the two pools, we see a stable group structure over time, with only three firms changing groups between periods. Stable groups imply that the strategic positions inferred by the analysis are representative of signficant strategic concerns of the sample MNEs.

We see that six firms in the first period, and eight firms in the second period, exhibit 'mixed strategies,' with high ($>\pm0.4$) loadings on more than one ideal type. All groups, in both pools, include both pure and mixed strategies. Other firms only indicate marginal strategic configuration, with no loadings of ±0.4 or greater. Intra-group strategies seem to be polythetic rather than the homogeneous strategies described in IO theory. Hypothesis 1 is supported as expected for a strategic management perspective.

If we use the strategic groups as input values in ANOVA with the period-average world wide sales (GLOBAL) as the dependent variable, we find very high F-values and R^2 values (Period 1: $F = 19.95$, $R^2 = 0.59$; Period 2: $F = 16.61$, $R^2 = 0.54$). This means that the groups 'explain'

Table 4.   Strategic profiles and group membership

Group	Firm	Component loadings			
		PC1	PC2	PC3	DFP
Period: 1974–79					
1	*Fiat	0.650	−0.481	0.230	0
	B-L	0.330	−0.365	0.244	0
	*Nissan	0.765	0.045	−0.556	0
	Renault	0.135	−0.54	−0.115	0
	*Toyota	0.632	0.350	−0.649	0
	VW-Audi	0.914	−0.277	−0.050	1
	Mean(SD)	0.57(0.26)	−0.13(0.28)	−0.15(0.35)	
2	Honda	−0.132	0.933	−0.110	0
	*Isuzu	−0.506	0.639	0.177	0
	Mazda	−0.020	0.696	−0.075	0
	Mitsubishi	−0.411	0.378	−0.032	0
	*Subaru	−0.109	0.471	−0.836	0
	Mean(SD)	−0.24(0.19)	0.62(0.19)	−0.18(0.35)	
3	BMW	−0.217	0.144	0.832	0
	Mercedes	−0.707	0.111	0.224	0
	*Peugeot	−0.609	0.502	0.333	0
	Saab	−0.391	0.347	0.763	0
	Volvo	−0.291	0.031	0.533	0
	Mean(SD)	−0.43(0.20)	0.23(0.17)	0.54(0.24)	
Period 1980–1985					
1	Nissan	−0.935	−0.059	−0.226	1
	Renault	−0.747	−0.097	0.129	1
	Toyota	−0.927	−0.033	−0.344	1
	*VW-Audi	−0.529	−0.828	−0.131	1
	Mean(SD)	−0.79(0.17)	−0.26(0.33)	−0.08(0.21)	
2	*Honda	−0.128	0.692	−0.522	1
	*Mazda	0.003	0.636	−0.440	0
	Mitsubishi	0.026	0.074	−0.132	0
	*Subaru	−0.463	0.870	0.032	0
	Mean(SD)	−0.14(0.19)	0.57(0.30)	−0.26(0.22)	
3	BMW	0.911	−0.130	0.161	0
	*Fiat	0.080	−0.560	0.509	0
	Isuzu	0.394	0.339	0.304	0
	*Jaguar(B-L)	0.438	−0.379	0.589	0
	*Mercedes	0.658	0.189	0.498	0
	Peugeot	0.215	−0.085	0.759	0
	*Saab	0.866	0.009	0.408	0
	Volvo	0.818	−0.083	−0.133	0
	Mean(SD)	0.55(0.29)	−0.09(0.27)	0.39(0.26)	

*Mixed strategy.

size; that is, firms of similar size tend to group together (see Appendix II for group means). Thus, although the strategic groups do not address global firm size directly, they divide the sample on the basis of potential market power. While the SM model does not focus on oligopoly strategies, as do IO models, we show that an attribute related to strategic behavior, firm size, is related to resource-based groups. As parent MNE size may indicate the potential for resource availability in the United States, this result is not surprising.

We should note that firms from both home regions group together in certain configurations, and not in others. Resource positions based on home regional characteristics are partially supported, particularly among the smaller firms in Groups 2 and 3, which are almost purely from a single home region. Dunning's eclectic model (1988) suggests that home country characteristics have a major impact on host country operational decisions.

Strategy and structure

In this section the ability of the firm-level strategy/structure connection of the strategic management model to explain the choice of trade or direct foreign production (DFP) as a product source for a host market is tested. Licensing outside of equity interest is not used in the industry during the period sampled. IO Models suggest that large MNEs may use DFP as a defensive maneuver. From an SM perspective, large firms may use more DFP because they have the capital resources to support an expensive structure which other firms would use if they could. This suggests the following:

Hypothesis 2: Large global MNEs should use DFP more often than firms with fewer resources.

We expect that MNEs with the proven skills to use DFP in one market or for one product will use DFP in other markets or for other products. A TC perspective would predict the same result because the firm would be facing similar transaction costs. We suggest that the following is true:

Hypothesis 3: Firms which use DFP in other host markets or for other products in the U.S.

will use DFP significantly more often than other sample firms.

In the SM perspective, the above relationship should be affected by the interaction of U.S. strategic configuration with the FSRs proven in other product/market situations. Thus, we can say:

Hypothesis 3a: Firm strategic configuration will significantly affect the apparent impact of resource oriented measures on the internalization decision.

The SM model predicts a strategy–structure connection, but one related to efficiency and not necessarily related to size. The need for management control should be more significant for firms with greater reliance on the U.S. market, given a particular strategy. The TC model, on the other hand, suggests that if the combination of transaction costs and scale of operations favors DFP, then strategy is not relevant to the internalization decision. This suggests that the following is true if the SM model holds:

Hypothesis 4: Strategic configuration and dependency on the U.S. auto market (US sales/global sales ratio) will predict the frequency of DFP use better than either measure alone.

Testing

The choice of investment versus exports is modelled as a dummy variable DFP, with values of 0 for trade and 1 for direct foreign production. The values of DFP for each firm are indicated in Table 4. None of the firms rely totally on DFP in the U.S. market, but the decision to use DFP indicates a shift in the planned structure for the host market.

As only one of the 16 firms used DFP during the strategic contextual period from 1974 to 1979, useful statistical analysis of the observations from this period is not possible. During this earlier period, few foreign auto firms saw the U.S. as a major market. The rapid growth of foreign car sales in the U.S. after the 1979 oil crisis, followed by the 1981 Voluntary Restraint Agreement on Japanese exports to the U.S., probably led to

the strategic conditions which favored DFP as a structural solution. This test will focus on the period from 1980 to 1985, during which time five firms began to manufacture some part of their product line in the U.S.

Table 5 shows the results of Logit regressions of the variable DFP on several categorical and continuous variables. These include strategic group membership (GROUP = 1, 2, 3), use of DFP in other markets (ODFP; No = 0, Yes = 1); other DFP in the U.S. (ODFPUS; No = 0, Yes = 1). Other independent variables are global sales (GLOBAL) and U.S. sales to global sales ratio (USRAT). Strategy is assumed to remain constant within the period, as indicated by the time sensitivity analysis above, while observations of the other variables are made for each year.

Table 5 shows that group membership is significant in explaining DFP in categorical models, and we can see from Table 4 that the firms in Group 1 (largest mean firm size) are all investors. Honda, the fifth investor, is in Group 2 and no firms in Group 3 are investors. GLOBAL is also significant, with a positive coefficient, in its LOGIT estimations of DFP. Hypothesis 2 is supported. The overall picture is that large MNEs will have similar strategies (Group 1) and will undertake DFP more than other firms. This situation may imply that large firms are indeed using DFP as a means of trying

to control the terms of competition in the sample industry, or it may indicate that the resources and strategies of large firms are best supported by production in the host market.

Categorical input variables which might indicate the possession of resources related to DFP skills (ODFP, ODFPUS) are significant when tested alone. However, when GROUP is added to the Logit model, these experience-oriented variables lose their significance. Strategic configuration dominates whatever efficiencies might result from experience with DFP. Hypothesis 3 is supported, but so is Hypothesis 3a. These tests indicate that strategic considerations are more important than experience related resources (or transaction cost considerations) alone in making the internalization decision.

USRAT is not a significant explanatory variable when used alone. This variable is marginally (0.10) significant when used in combination with GLOBAL. USRAT is not significant used as an explanatory variable in a Logit regression with GROUP. The overall chi-square value of this last regression is only marginally greater than for GROUP alone. Hypothesis 4 is not supported. The choice of structure is strongly associated with strategic configuration, but DFP appears to be used almost exclusively by larger firms. Measures which attempt to introduce efficiency concerns are dominated by strategic position and

Table 5. Strategy and structure during 1980–85 (dependent variable: DFP)

GROUP	ODFP	ODFPUS	GLOBAL	USRAT	Model X^2
−2.152 (17.05)***	—	—	—	—	30.18
—	—	—	0.0015 (3.35)***	—	12.92
—	1.338 (4.78)**	1.121 (3.55)*	—	—	11.30
−1.985 (11.67)***	0.272 (0.11)	1.002 (1.83)	—	—	32.76
—	—	—	—	1.034 (0.74)	0.530
−2.444 (13.45)***	—	—	—	2.731 (1.69)	31.85
—	—	—	0.0016 (3.58)***	2.890 (1.71)*	15.68

Values in parentheses are individual X^2 scores.
Significance: *$p < 0.10$; **$p < 0.05$; ***$p < 0.01$.

global size as explanations of the use of DFP The resources which relate to the use of DFP in the U.S. are those related to MNE size rather than experience or relative market commitment. This is not inconsistent with resource-based SM theory, and is typical of earlier studies of DFP (Hood and Young, 1979).

Strategy, Structure, and Performance

Models of firm activity must be able to predict performance if they are to have real value. Models of the firm which emphasize the importance of strategic decision-making try to associate strategic choice with differential performance levels. The SM model predicts that resource position, strategic purpose, and structural efficiency in the context of the environment will predict performance. If, instead, host country strategic group membership largely determines level of performance, then arguments for market power models of the MNE are strengthened. However, if internalization structure alone predicts performance, then efficiency models are supported (Hill and Kim, 1988). In support of the integrated strategic model, we suggest the following:

Hypothesis 5: Interactions among firm-specific resources, strategic configuration, and structural form should explain performance better than any single aspect of host country activity.

Testing

Choosing the explanatory variables for firm performance is the last step in comparing these alternative approaches to the MNE and to structural forms in a host market. Unfortunately, the firms chosen for this study are subsidiaries of foreign parent companies with operations in many countries. Financial data are not available in any regular form for the U.S. subsidiaries separately from other regional operations. Since comparisons of parent company profitability are inappropriate for relating the activities of single subsidiaries, a measure of performance more closely related to the market is needed.

The measure chosen is annual percentage increase in market share (PMKT). The relevant market is that for foreign autos in the United States. The study intends to provide a direct comparison of the success of the firms in

competition with each other. The effect of a 'rising tide' of increasing foreign car sales over time on all the firms is eliminated. Studies show a relationship between market share or relative sales and profitability (Cool and Schendel, 1987). The most common popularly used expressions of firm performance in this industry are unit sales and market share. In addition, a survey conducted in conjunction with this study indicated that market share objectives in the U.S. were a major concern of many of the foreign auto makers during this period. Percentage change in market share removes size effects which would dominate in any measures of actual unit sales or simple change in market share.

Table 6 shows the results of several regressions of PMKT on different explanatory variables for each contextual period. In the first time period, strategic group membership is highly significant with a high explanatory value for PMKT. Group 2 shows a significantly higher coefficient than the other two groups, and has a higher mean value for PMKT (see Appendix II). The DFP variable alone is not treated in the first period, as only two observations indicate the use of U.S. production. Although GROUP is significant in explaining performance in the first period, the group which contains large firms (Group 1) is the lowest in performance. Strategic configuration is important to performance, but firm size is not. This result can be considered as supporting the SM model, but not market power models.

USRAT, a measure of strategic resource focus on the U.S. market, provides a significant explanation for PMKT in period 1, and has a positive coefficient. This result indicates that firms with greater commitment to the U.S. market gain market share faster than other firms. When a least-squares with dummy variable (LSDV) regression is run with GROUP treated as a dummy and USRAT as a continuous variable, we see a significant F-score, but no significant coefficients. The individual F-score for GROUP is significant ($F = 4.75, p > F = 0.004$). These results imply that there are interactions between GROUP and USRAT in explaining performance. In Appendix II we see that Group 2 has the highest means for both USRAT and PMKT, confirming a relationship between the variables. The significance of firm resource and strategic group measures provides support for Hypothesis 5 in period 1.

Table 6. Performance indicators (dependent variable: PMKT)

INT	GROUP	DFP	USRAT	F	R^2
Period: 1974–79					
−0.025(−0.36)	=1:−0.004(−0.05)			5.65***	0.13
	=2: 0.272 (2.84)				
	=3: 0.000				
−0.070(−1.13)			0.703 (2.67)***	7.14***	0.08
[LSDV]	=1:−0.072(−0.98)		0.328 (1.08)	3.85***	0.17
	=2: 0.158 (1.38)				
	=3:−0.069(−0.87)				
Period: 1980–85					
0.004 (0.06)	=1: 0.091 (0.06)			0.42	0.01
	=2: 0.013 (0.91)				
	=3: 0.00				
0.120 (1.20)		=0:−0.109(−0.99)		0.98	0.01
		=1: 0.00			
−0.042(−0.66)			0.319 (1.44)	2.09	0.02
−0.090(−1.40)		DI=0	0.462 (2.07)**	4.27**	0.05
0.299 (1.33)		DI=1	−0.699(−0.95)	0.90	0.06
0.522 (2.67)	GROUP=1		−2.238(−2.38)**	5.65**	0.20
−0.049(−1.45)	GROUP=2		0.178 (2.21)**	4.88**	0.20
−0.133(−1.48)	GROUP=3		0.764 (2.16)**	4.66**	0.09

Numbers in parenthese are *t*-scores.
$p >$ test score: *** = 0.01; ** = 0.05; * = 0.10.

In the second period, none of the independent variables alone provides a significant explanation for PMKT levels. Group identity does not have significance in explaining PMKT in period 2, and the groups have very similar means (Appendix II). This difference between time periods could be attributed to maturation of the market, such that rapid share growth is more difficult, or to the impact of the Voluntary Restraint Agreement of 1981 on smaller Japanese firms in Group 2, which had their sales levels frozen during much of this period. DFP alone is not significant to explaining levels of PMKT, either. LSDV regressions of USRAT with either GROUP or DFP as a dummy (not shown) also are not significant.

However, when the sample is split either by DFP value or by GROUP value, and separate regressions of PMKT on USRAT are run, the results become significant. Specifically, a regression using only the DFP = 0 sample for period 2 shows a significant *F*-score. When the sample is separated by strategic group membership, all regressions of PMKT on USRAT show significant *F*-scores, and Groups 1 and 2 show meaningful R^2 levels. Graphically, these results would show that the slopes of the regression lines of PMKT on USRAT for each cluster are very different, as is evident from the values of the beta-coefficient of USRAT in each case. This result explains the non-significant results for the full sample in the period. The interactions of resource commitment and structure or resource commitment and strategy are very different for each group of firms. This is consistent with a strategic management perspective.

Significant results when combining measures of firm-specific resource commitment, such as USRAT, with either strategic group variables or structural variables support Hypothesis 5. The interaction of resources, strategy, and structure to generate performance appears to be supported. An integrating approach to host country activity by MNEs, as represented by strategic management, seems to provide more insight than either market power or firm structure considerations alone.

SUMMARY AND CONCLUSIONS

The stated purpose of this paper is to apply principles derived from the resource-based strategic management model of competitive strategy to the behavior of a group of multinational firms in a single host market. The hope behind this effort was that the combination of resource position, market strategy, and firm structure at the heart of the SM model would predict the activities and performance of the sample firms successfully. The broader, more flexible perspective of SM theory was expected to provide insights beyond those available through strict adherence to the industrial organization (market power) or institutional economics (transaction cost) models of the MNE. In addition to bringing new ideas to the study of the MNE, this study was also intended to show that international samples could add to the understanding of the developing resource-based model of strategic management.

In relation to the first objective, generating new understanding of the host country activities of MNEs, the study is a success. Strategic grouping methodologies applied to a sample of firms from two major industrial regions working in third member of the 'industrial triad' are able to distinguish host market strategies separate from simple effects of national origin. These strategic groups are stable over time, and appear to make intuitive sense. The groups are highly significant in explaining the structural decision to organize host country production subsidiaries. Other measures which would have been expected to explain the move to DFP under the assumptions of alternative theories are notably less successful. Finally, using a measure of performance of considerable importance to the industry, the study is most successful in explaining performance differences through a combination of resource, strategy, and structural measures. These results indicate that the SM model can be profitably applied to studies of MNEs. Firm-specific considerations in a particular host environment are more important to performance effects than are measures of the broad, worldwide skills of the parent company.

At certain points in the empirical study, considerations relevant to the use of IO or TC models are tested. Although large firms are found to be more likely to employ DFP, as expected in IO models, these firms are notably less successful than smaller firms. In relation to institutional economics models, the effects of transaction cost-oriented measures are tested and found to be less significant than strategic configuration in measuring performance. The direct choice of market versus hierarchy for production is not significant in explaining performance.

The study succeeds in demonstrating the value of a new theory of competitive strategy to studies of the MNE, and it also shows the value of international studies to refining a theory of strategy. A major difficulty in resource or organizational theory-based models of strategy is that of making a clear determination of resources available to each member of a group of competitors using imitative strategies. The split of firms between different home markets permits home market considerations to influence host market strategies. Firms from different home markets can be expected to differ in their initial set of FSRs and in their resulting strategic and structural decisions. We see a Japanese strategic group, a mostly European group, and a mixed group all clearly defined.

We can also identify a new measure of structure. In domestic studies the structural decision generally seems to be a choice of functional or product divisions. An international sample permits the observation of geographical structure and the direct consideration of market versus hierarchical structures. The choice of licensing, exporting, or investing to provide product to a host market is clear and easily measured. Greater use of multinational firms in strategy studies should add significantly to our understanding of the various models of competitive strategy.

If the two academic objectives of the paper are met, what can be said about the real world from the results? One issue that is obvious is the importance of local strategic objectives to performance in a host market. Focusing only on 'global' purposes is misleading. Even in the U.S. market we see large firms, such as Fiat or Renault, finding little success, and virtually abandoning the market. Other firms, less significant in the worldwide market, are much more successful in North America. Strategies and structures in one host market are not necessarily the same as those in the home region or in

other host markets. The concept of globally homogeneous strategies is shown to be imprecise. Today, at least, worldwide strategy is built up from many national strategies.

The latest model of world-wide competition (Porter, 1990) restates the importance of country of origin to international strategy and success. This study indicates that firms do tend to group with similar firms, and that region of origin is important, if less so than firm size. The study shows equal use of DFP among European and Japanese firms. If we look at the world in 1990, though, we see that *all* the Japanese firms are moving to DFP, while *none* of the European firms are manufacturing in the U.S. In terms of the model used here, this phenomenon seems to reflect a strong imitative component to strategies in the industry. Choices in the face of a devalued dollar and lower profits in the U.S. have narrowed. However, the importance of interactions among resources, strategies, and internalization would indicate that some of the firms in either group are wrong. Not all Japanese firms can succeed by copying Honda, due to resource commitment and strategic scope differences. Nor can all European firms expect to do well by selecting a BMW-like strategy and structure. Excessive imitation will only speed the inevitable shakeout in the industry. Simply coming from the same home market cannot give all firms from that home region identical resources. Therefore, the idea of uncertain imitability (Lippman and Rumelt, 1982) implies that purely imitative operational decisions will not provide identical degrees of success.

The important lesson of this study is that all global competition takes place on the local level. Both modelers of strategy and practitioners of strategy should keep this in mind when considering worldwide operations.

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APPENDIX I: CORRELATION MATRICES

	PC2	PC3	PMKT	GLOBAL
1974–79				
PC1	−0.55**	−0.44*	−0.33	0.83***
PC2	1	−0.17	0.78***	−0.43*
PC3		1	−0.35	−0.49**
PMKT			1	−0.34
1980–85				
PC1	−0.02	0.45*	0.02	−0.80***
PC2	1	−0.45*	0.33	−0.34
PC3		1	−0.11	−0.26
PMKT			1	−0.18

Significance levels: $*p > 0.10$; $**p > 0.05$; $***p > 0.01$.

APPENDIX II: PMKT, GLOBAL, USRAT Means by GROUP

Group	Variable	n	Mean	S.D.
1974–79				
1	PMKT	6	−0.029	0.108
	GLOBAL	6	1.344M	0.415
	USRAT		0.131	0.087
2	PMKT	5	0.283	0.147
	GLOBAL	5	0.324M	0.203
	USRAT		0.276	0.189
3	PMKT	5	−0.17	0.063
	GLOBAL	5	0.324M	0.223
	USRAT		0.131	0.084
1980–85				
1	PMKT	4	0.092	0.240
	GLOBAL	4	1.791M	0.425
	USRAT		0.191	0.82
2	PMKT	4	0.009	0.023
	GLOBAL	4	0.620M	0.293
	USRAT		0.373	0.206
3	PMKT	8	0.014	0.236
	GLOBAL	8	0.524M	0.467
	USRAT		0.178	0.182