

Dynamics of Policy and Strategic Behavior: Study on Transnational Corporation Subsidiaries in China

Vipin Gupta¹, Jifu Wang² and Jinhua Zhao³

Abstract

Globally, a new model of MNC based on the disaggregated corporate model and globally dispersed value chain network has emerged. In large emerging markets, the policy makers face a dilemma of how to situate the nation in this emergent global network. In China, the government policy has been biased towards encouraging a more centralized TNC control of R&D and manufacturing. We study the extent to which the TNCs have been able to adopt a distributed model in an institutional context that promotes a centralization strategy bias. In this paper, we examine the role of four factors: cultural distance, role assigned to the subsidiaries, TNC's global strategy, and functional imperatives. Our investigation is guided by a series of analysis using a survey sample of TNC subsidiaries in China.

Keywords: policy context, transnational corporations (TNC), technology transfer, cultural distance, subsidiary role, global strategy, function imperative, firm behavior

1.0 Introduction

In the new information and communication age (Freeman and Louçã, 2001), the nature of international business activity is undergoing profound changes.

¹PhD, Professor & Associate Dean, College of Business and Public Administration, California State University – San Bernardino, USA. E-mail: gupta05@gmail.com, Phone: (508)872-0533

²PhD, Associate Professor, School of Business Administration, University of Houston-Victoria. E-mail: angj@uhv.edu

³PhD, Professor and Dean, School of Government, Central University of Finance and Economics. E-mail: yuhuan.lee@163.com

As the world has become flat (Friedman, 2005), international business activity is taking shape of disaggregated and geographically dispersed value chains (Gereffi et al, 2005). Yet, the TNCs are also being challenged to find new ways for centralized coordination of functions, including R&D, marketing and finance, across these dispersed value chains, and for control over subsidiary management and decision making (Alcacer et al, 2013). New forms of centralized coordination and control depart from traditional hierarchies, and take shape of interorganizational collaborations and the enabling characteristics of the institutional contexts in which these relations are embedded (Aguilera, 2011).

The institutions-based view of the strategy holds that the TNCs strategically react to the institutional policies (Peng, Wang, & Jiang, 2008). Research shows that the TNCs strategically react to the institutional constraints to appropriately adapt development of their capabilities (Zhao, 2006). At one extreme, TNCs may perceive above policy biases as inhibiting their power to orchestrate international networks, and dismiss such institutional contexts as weak. Consequently, some TNCs may be alienated and precipitate a climate of crisis (Laeven & Valencia, 2012). In case of China, evidence suggests that a large number of TNCs from diverse nations have still made a strategic decision to invest and grow. What factors have influenced the behavior of these TNCs?

There are two distinct paths for TNC strategy development, in response to institutional constraints. One path is to respond primarily by transferring the global know-how, in order to access a large local market. When the production is scale-intensive, such response carries the risk that the TNC cost-structure might deteriorate, unless it is accompanied by transfer of global production as well to the Chinese subsidiaries (Krugman, 1991). Thus, strong policy bias towards global knowledge transfer could improve the bargaining power of the local subsidiaries, and allow them easier access to both the global know-how as well as the opportunity to become the global factory base. However, on the flip side, the subsidiaries might be locked into a culture for hierarchical application of parent company know-how, with minimalist local innovation, as also suggested by the theory of organizational imprinting (Johnson, 2012). From the TNC perspective, transferring global know-how and scale-sensitive production to China is the second best strategic option from a cost-effectiveness perspective, dictated by the policy constraint. Thus, a policy focus on the transfer of global technology and its reengineering is likely to erode cost-base competitive advantage and also undermine original innovations grounded in local culture and context.

Another path is for the TNCs and their subsidiaries to recognize the possibilities of cost lowering innovations in the local market, based on a distinct culture of material and resource saving in the context of an emerging market. In this case, the local subsidiaries become not only a recipient of global knowledge, but also a source of new knowledge about cost-effective innovations (Govindrajana&Ramamurti, 2011). As the TNCs adopt these cost-effective practices and processes in other nations, they may be able to organize more decentralized production system and be less sensitive to the issues of scale and production centralization.

Which of these two paths is evident in case of China? There exists anecdotal evidence of a growing concern about the deteriorating cost-based competitiveness of the Chinese export-sector, and rather slow development in innovative differentiation-based competitive advantage. Media is also reporting evidence of the TNC subsidiaries struggling to cope with the costs of enhanced labor compensation, working conditions and environmental accountability. This suggests that the first path may be more prominent. Studies also indicate that a large part of TNC R&D in China continues to focus on local adaptation (D'Agostino and Santangelo 2012), with only limited evidence of the firms moving to transfer these local innovations to their global network. However, some success stories of the second path may exist as well, consistent with a disaggregated and flat organization model (Zenger and Hesterly, 1997). In this study, we examine the factors that influence the adaptation behavior of the TNC subsidiaries in China.

2.0 Literature Review

TNCs face a trade-off between an emphasis on the firm-specific advantages and reliance on local country-embedded innovations (Bartlett & Ghoshal, 1989). Some TNCs focus on centralized global integration for exploiting firm-specific advantages, while many others emphasize decentralized local autonomy for tapping locally embedded advantages. Strategic imperative for centralized global integration lies in the value of cross-border transferability of globally integrated know-how (Szulanski, 1996). Jensen and Szulanski (2004) found that when the TNCs decentralize and adapt to the local contexts, the difficulty of transferring organizational practices across borders increases. First, there is causal ambiguity about which organizational practices are the basis for success and why. Second, subsidiaries in different nations have limited absorptive capacity (Cohen & Levinthal, 1990), i.e. prior knowledge base, in the practices adapted to another context.

On the contrary, strategic imperative for decentralized local adaptation lies in the motivational effects of practices that are tuned to particular cultural and institutional contexts (Kostova & Roth, 2002). The local constituencies are likely to be more motivated and productive when the organizational practices are meaningful from a local perspective, and carry legitimacy of the local institutions (Kostova, 1999; Fink & Holden, 2005). The motivational issues tend to be particularly salient when cultural and institutional distance is large (Berchtold, Pircher & Stadler, 2010).

Empirical evidence on the relationship between the degree of centralization by the parent TNCs and the performance of their Chinese subsidiaries is mixed. Some studies of Chinese subsidiaries report a positive relationship (Mjoen & Tallman, 1997), attributed to the strengths of the parents' firm-specific advantages. This is explained in terms of the transaction cost theory, according to which when the firms have more specific advantages, more centralized control helps prevent those from unintentionally spilling over to a local partner (Williamson, 1985). Other studies report a negative relationship (Beamish, 1993), because of the need for subsidiaries to have greater local autonomy for tapping country-specific advantages in China.

The differing effectiveness of centralization strategy points to some missing variables. Based on the prior literature, we identify four major missing variables: degree of cultural distance, role assigned to the subsidiary in the global strategy, type of global strategy, and functional imperatives (see Table 1 for overview).

Table 1: Theoretical Background Overview on Four Missing Variables

Variable	Local partner	Context	TNC Response	TNC Response	Examples
Cultural distance	<ul style="list-style-type: none"> Acting as cultural informants; Allowing TNCs to offer autonomy to subsidiaries 	High TNC perception	Rely more on joint ventures	Administrative heritage	<ul style="list-style-type: none"> European firms: cultural diversity & local adaptation; American firms: blind to cultural diversity & global integration
		Low TNC perception	Rely more on wholly-owned subsidiaries		
Subsidiary roles		Mixed copy of parent TNC	Trading advanced technology transfer	Need for TNC global value chain	Miniature replicas;
		Rational manufacturer role	Producing parts or finished products		Serving as offshore centers
Global strategy type		Pursuing globally integrated	Exerting high control	Maximizing global network advantages to best leverage and develop these advantages subsidiary's local advantages	
		Pursuing locally responsive strategy	Offering high autonomy to subsidiaries		
Functional Imperatives		Seeking greater control and centralization of research and manufacturing functions	Taking hybrid of centralization	Macro context	<ul style="list-style-type: none"> Chinese government policy; Firm needs for increasing returns; Weak Chinese institutions.

2.1 Cultural Distance

When cultural distance between the parent TNC and the local country is high, it is more challenging to pursue global integration (Fan, Zhu & Nyland, 2012). Cultural distance perceptions are associated with the mode of entry choices – when the TNCs perceive high cultural distance, they are more likely to rely on joint ventures, as opposed to the wholly-owned subsidiaries (Kogut & Singh, 1988). Local partners can act as cultural informants for the TNCs (Fortier & El Hadrioui, 2012), and allow TNCs to offer autonomy to their subsidiaries to best exploit local resources and to best respond to the local contingencies.

TNC response to cultural distance is a function of their administrative heritage. For instance, the European firms have an administrative heritage of dealing with considerable cultural diversity, and their approach often involves local adaptation. In contrast, the American firms have an administrative heritage of being blind to cultural diversity, and their approach seeks global integration through only surface adaptations to tougher and unavoidable cultural challenges (Bartlett & Ghoshal, 1989).

2.2 Role Assigned to the Local Subsidiary

The second variable is the role assigned to the subsidiary within TNC's global value chain. White and Poynter (1984) identify several categories of subsidiary roles, including (a) mixed copy of parent TNC, where subsidiary are miniature replicas who replicate or adapt the TNC product and marketing plan in the local market and (b) rational manufacturers, who produce parts or finished products for a multi-country market or as offshore centers of the upstream global factories. The subsidiaries that exercise the option of trading advanced technology transfer for local market access are more likely to operate as a mixed copy of parent TNC. They are likely to have a position of strength and perceive a larger set of opportunities, that include global as well as the local market. In contrast, the subsidiaries that are assigned a rational manufacturer role, are likely to be under perceptions of weakness if they are expected to serve multi-country market but lack advanced technical or organizational capacity to address the range of diversity of these varying markets, and/or of threat if they are expected to serve as offshore centers of a single more advanced value chain link that holds greater bargaining power, and that then serves the multi-country market.

2.3 Type of Global Strategy

As suggested by Doz & Prahalad (1994), type of global strategy also moderates the relationship between the degree of centralization and the subsidiary performance. When TNCs pursue a globally integrated strategy, the emphasis is more on the global network advantages, and the TNCs need high control to best leverage and develop these advantages. Conversely, when the TNCs pursue a locally responsive strategy, the emphasis is more on the subsidiary's local advantages, and the TNCs need to offer a high autonomy to the subsidiaries to best leverage and develop these advantages. Institutional constraints influence the type of global strategy.

The Chinese policy to permit the entry of TNCs only if they commit to transfer not only their technology but also organizational and management know-how is identified as a key factor fostering more centralized ties between the Chinese subsidiaries and their TNC parents.

2.4 Functional Imperatives

The final factor to consider is functional imperatives. Most TNCs do not follow a strategy of complete centralization or of complete local autonomy. The reality tends to be a hybrid of the two and is a reflection of transnational solution (Bartlett and Ghoshal, 1989). Certain functions are more centralized. In China, TNCs are likely to seek greater control and centralization of research and manufacturing functions, because of (1) the policy of the Chinese government that encourages TNCs to transfer their advanced firm-specific advantages, particularly in the areas of research and manufacturing, (2) the strategic needs for exploiting the increasing returns inherent in research and manufacturing functions, and (3) weak Chinese institutions for protecting and appropriating technological know-how. Similarly, there is likely to be greater centralization of finance, investment, and accounting functions, because in nations with weak institutions and reliance on relational contracting, the likelihood of corruption and fraud tends to be higher and stronger oversight is required on the accounting standards and transparency (Scofield & Wilhelm, 2004).

Conversely, some other functions are likely to be more decentralized. The policy of the Chinese government offers access to local Chinese market in exchange for the transfer of advanced technology (Deng, Falvey, & Blake, 2012), which should encourage greater decentralization of the marketing function in order to exploit the local access. Similarly, some adaptation may be expected in the human resource function. Previous empirical studies have found that the TNCs tend to replicate their parental human resource system in the Chinese subsidiary (Hartmann, Feisel, & Schober, 2010) however the leaders of the Chinese subsidiaries are also sensitive to the peculiarities of the Chinese cultural and institutional context and seek autonomy in making decisions on how to execute the parental human resource system within the Chinese context (Smale, 2008).

3.0 Sample and Data

Our sample comprises of 400 foreign subsidiaries in China, of which 128 (32%) returned completed responses to a survey conducted between October 2004 and May 2005, across more than 15 cities in China, including Shanghai, Beijing, Tianjin, Dalian, Fuzhou, Guangzhou, Hefei, Jinan, Changchun, Suzhou, Qingdao, Lianyungang, Anhui, Weihai, and Songwan. The postal mail was followed up with telephone and email. The survey included questions related to the mode and sequence of entry, growth and development patterns, bases of competitive advantage, degree of centralization, and functional strategies. In addition, interviews were conducted with some of the respondents to get qualitative insights. The Chinese Ministry of Commerce, provincial foreign economic bureaus, local municipality economic departments and offices in charge of the economic and technological zones, the Seoul University and the South Korea Manufacturing Research Association offered assistance in reaching out to the respondents.

Table 2 presents the characteristics of the responding firms and the respondents

Table 2: Characteristics of Respondent TNC Subsidiaries in China

Characteristics	Variables	N	% of total
Country origin	South Korea	43	33.6
	USA	28	21.9
	European Union	25	19.5
	Japan	22	17.2
	Others	10	7.8
Degree of foreign ownership	100%	91	71.1
	Majority	34	26.6
	Minority	3	2.3
Industry	Electronics	35	27.3
	Textile	23	18.0
	Chemistry and Pharmaceutical	15	11.7
	Iron, Steel, Mechanics and Engineering	13	10.2
	Auto Manufacturing	9	7.0
	Food and Beverages	9	7.0
Respondent rank	Others	24	18.8
	Board Members	13	10.1
	CEO	13	10.2
	Vice CEO	16	12.5
	Department Manager	46	35.9
	Others	31	24.2
Firm age	Unknown	9	7.0
	Less than 5 years	43	33.6
	5-9 years	49	38.3
	10-15 years	22	17.2
	More than 15years	10	7.8
Unknown	4	3.1	

4.0 Findings

Having analyzed the survey data and contents of the interviews with TNC managers, we have the following discoveries (See Table 3 for summary of findings).

Table 3: Summary of findings

Variable	Sequency	Western TNC perception	Western TNC commitment	Western TNC Actions	East Asian TNC perception	East Asian TNC commitment	East Asian TNC Actions	Shared in common
Cultural distance	Initial Stage	Higher degree of cultural distance in China	Moderate	Joint ventures	Lower degree of cultural distance in China	High commitment	Wholly owned subsidiaries	Not favor acquisitions of local firms for expansion
	Later Stage	Dynamic	Higher	Increasing equity shares	Dynamic			
Subsidiary roles	Primary role	Low cost production base	Penetrating Chines market	Global production bases	Low cost production base	Exporting products from China back home and other country markets	Supplying parts	Playing supporting role
	Secondary role	Engaging in value-added production	Supporting home-base needs and other global markets	Local marketing powerhouses	Part of Global value chain	integrated with their home operations	Providing strategic function globally	Becoming strategic unit
Global strategy type		Difficulty securing loans from the local banks	Greater emphasis on building relationships with local government; Oriented more towards local sales in China	Having highest local sales ratio	Difficulty securing loans from the local banks	Less emphasis on building relationships with local government; Oriented more towards exporting	Dependent on sales to parent country; Focused on sales to third countries	Low degree
Functional Imperatives		Centralization in top leadership functions	Control key positions and power of appointment	Expatriates	Centralization in top leadership functions	Control key positions and power of appointment	Expatriates	High degree

4.1 Issues of Cultural Distance

Our interviews suggested that the Western TNCs perceive a higher degree of cultural distance in China, which makes entry modes based on moderate commitment, such as joint ventures, more appropriate.

Such entry modes rely on local participation, as a way to benefit from the resources, networks, and knowledge of the local partners, and to adapt to the local cultural and institutional context. In contrast, the East Asian TNCs perceive a lower degree of cultural distance in China, which makes entry modes based on high commitment, such as wholly owned subsidiaries, more appropriate. Such entry modes allow the TNCs to better integrate local operations with their home and global operations, because of a greater expectation of fit between their organizational structure, routines, and culture with the local context.

As shown in Table 4, the Western TNCs are more likely to use joint ventures as a mode of entry, while the East Asian TNCs are more likely to use wholly-owned subsidiaries. The entry mode is correlated with the parental TNC national origin: $\chi^2(3, N = 114) = 10.594, p < 0.05$.

Table 4: Entry Mode X Parent Country

	US	Japan	EU	Korea
New wholly foreign owned firms	12	13	11	33
New joint ventures	11	7	11	7
Wholly foreign owned firms through acquisition	0	1	1	1
Joint venture through acquisition or merger	2	0	1	0

Perceptions of cultural distance tend to be dynamic – as the TNCs gain experience operating in a distant culture, they may begin perceiving that culture as less distant and may seek to play a stronger role in that market.

TNCs who enter initially through joint ventures might subsequently increase their share of equity, including in some cases to wholly owned subsidiaries. However, not all TNCs might do so, because of other variables, such as varying global strategy and varying roles assigned to local subsidiaries. In our sample, 28.2% of the TNCs increased their equity.

In general, during the initial years, the primary role of the Chinese joint venture subsidiaries was as low-cost production base and the key challenges included developing appropriate local human resource strategy, cultivating local suppliers and assuring stringent quality control. The local strategic alliances of the TNC subsidiaries were focused primarily on tapping the local Chinese capabilities for low-cost supplies. More than 75% of the respondents identified that their key motivation for local alliances was procurement cost reduction, with mean > 3.5 on a 5-point scale.

AsTNCs adjusted their global strategy to put greater emphasis on acquiring larger market shares within China, they found that their local partners were reluctant. The local Chinese partners were more interested in (a) the enhanced role for the joint venture operations in the TNC global network through transfer of responsibilities for even higher technology and skill intensive activities, and (b) protecting and promoting their own participation, outside of the joint venture, in the local Chinese market.

The TNCs therefore sought to achieve greater control. The findings in Table 5 show that TNC global strategy adjustments, the importance and performance of the local subsidiary and the strategic goal differences with the joint ventures were key factors in increased shareholding.

Table 5: Reasons for Change in Foreign Shareholding Ratio

The reasons of changes in the shareholding ratio	N	Mean	SD	% reporting 4 or 5, on a 5 point scale
Global strategy adjustment of the parent company	24	3.71	1.083	62.5
Change of control for core technology and resources	20	3.55	0.887	40.0
Change of subsidiary importance in the parent network system	20	3.50	1.192	50.0
Difference in strategic goal for joint ventures	18	3.39	1.145	44.4
Changes of company performance	26	3.35	1.294	42.3
Change of host country regulatory environment	21	3.24	0.995	38.1
Change of host country market environment	20	3.10	1.021	30.0
Cultural conflict in business management	19	2.95	0.780	26.3

Note: 1 = strongly disagree, 5 = strongly agree

4.2 Issues of Roles of Local Subsidiaries

Our interviews indicated that the primary role mandate given by TNCs to their subsidiaries in China is to be low cost production centers for their global value chains and/or for penetrating the Chinese market. The role mandate varies by the parental TNC origin.

Japanese TNCs have assigned their subsidiaries the primary role of exporting products from China back to the home nation for advanced value addition and then re-export to the global market. Korean TNCs have assigned the primary role of exporting the production to multi-country markets worldwide. The US and European TNCs have assigned the primary role of using the products manufactured in China to develop and penetrate Chinese domestic markets and the secondary role of supporting value-added production and direct needs of the home base and other global markets.

The Western TNCs have broadened the role of their local subsidiaries from primarily global production bases in the past to the local marketing powerhouses. Commensurate with the broader role, the Western TNC subsidiaries tend to rely on broader sources of competitive advantage.

This is indicated by a positive correlation between TNC subsidiary's competitive position (i.e. market share of the subsidiary relative to that of its largest competitor) and self-reported competitive advantages in product, service, customer relationship, quality, logistics, core technology and R&D capability. The Japanese TNCs, on the other hand, have entrusted to their Chinese subsidiaries increasingly advanced roles integrated with their home operations. Their subsidiaries tended to report a moderate base of competitive advantage sources. Finally, the Korean TNCs have entrusted to their Chinese subsidiaries a distributed global marketing role, and their subsidiaries report the weakest base of competitive advantage sources.

A broad source-base of competitive advantage was correlated with a perception of strength and an attenuated perception of threat. It was associated with a broad business strategy emphasis on differentiation, such as in terms of diversified product portfolio and corporate image. As shown in Table 6, the TNC subsidiaries in the strength-opportunity quadrant likely to demonstrate stronger emphasis on broad differentiation such as product portfolio and corporate image, followed by those in the strength-threat quadrant. Those in the weakness-opportunity quadrant are likely to demonstrate weakest emphasis on broad differentiation.

Table 6: Competitive Advantage Initiatives X Perceived SWOT Posture Mean Differences Test

Variable	Comparing groups	difference	Significant levels	Sorting groups
Corporate image	SO-ST	0.14		SO>ST>WO
	ST-WO	-0.36	*	
	SO-WO	0.50	**	
Product portfolio	SO-ST	0.09		SO>ST>WO
	ST-WO	1.00	**	
	SO-WO	1.09	**	

Note: ** $p < 0.05$; * $p < 0.01$

4.3 Issues of Global Strategy

Some TNCs sought to build and leverage relations with the Chinese government in order to secure enhanced access to the local sources of funds, to pay for their global know-how and/or for its local exploitation and for accessing domestic market for sales penetration.

This was particularly true for the Western TNC subsidiaries that put a greater emphasis on building relationships with the local government than did the East Asian TNC subsidiaries. Table 7 shows that the US TNC subsidiaries have highest local sales ratio, accounting for three fourths of their total sales. Japanese TNC subsidiaries are most dependent on sales to parent country, with their sales in Japan being slightly greater than their sales in China. Korean TNC subsidiaries are more focused on sales to third countries. East Asian TNC subsidiaries are more oriented towards exporting while the Western TNC subsidiaries are more oriented towards local sales in China. The export-sales ratio is significantly related with the country of the parent company (ch square = 16.901, df = 3, $p < 0.001$).

Table 7: Export and Domestic Sales by Country

	Domestic sales (%)	Products to parent firm country (%)	Export to other Countries(%)
U.S.	75.56	16.67	7.78
Japan	41.27	44.12	14.79
EU	53.40	34.87	10.53
S Korea	28.69	26.03	45.28

Administrative heritage and cultural distance matter. The strategy of the Western TNCs was influenced by competition in the local market (determining their success in penetrating the Chinese market) and by the TNC perceptions of the effectiveness of the local intellectual property protection regime and the attractiveness of China for the foreign expert expatriates (determining TNC willingness to respond to the local desire for greater participation in the global network). This was more so for the Western TNCs than for the East Asian TNCs that persisted in using their Chinese operations as low-cost production centers. The Japanese TNCs used their Chinese subsidiaries as bases for exports of intermediate products to Japan, which were then processed into more advanced products for worldwide marketing.

The Korean TNCs used their Chinese subsidiaries as bases for direct exports to their markets around the world and put particularly low emphasis on building local distribution channels as a source of competitive advantage. Given the cultural and institutional proximity, the development of the East Asian TNCs was not as sensitive to the issues of intellectual property regime and attractiveness of China for their expert expatriates either.

Greater sensitivity to the local conditions helped Western TNCs achieve a stronger level of strategic alignment between internal capabilities and the external context. On the other hand, the East Asian TNCs experienced a higher degree of misalignment. The Japanese subsidiaries had stronger ties with the parent TNC in the form of exports of intermediate inputs and therefore, they benefited from continued support from the parent TNCs and enjoyed a perception of strength persistence. However, this also meant greater misalignment with the shifting market environment. The Korean subsidiaries had stronger ties with the globally distributed markets, and were more strongly attuned to the external market opportunities. But their capabilities were stretched thin in trying to respond to the varying external pressures. Table 8 shows the Western TNC subsidiaries are more likely to hold perceptions of being in the favorable strength-opportunity quadrant than the East Asian TNC subsidiaries. The Japanese TNC subsidiaries are more likely to hold perceptions of being in the strength-threat quadrant while the Korean TNC subsidiaries are more likely to hold perceptions of being in the weakness-opportunity quadrant.

Table 8: Classification of Subsidiaries by Perceived SWOT

CountryOrigin	SWOT Type			Total
	ST	SO	WO	
U.S.	6	16	2	24
	25.0%	66.7%	8.3%	100.0%
Japan	6	6	4	16
	37.5%	37.5%	25.0%	100.0%
EU	5	16	3	24
	20.8%	66.7%	12.5%	100.0%
South Korea	6	17	13	36
	16.7%	47.2%	36.1%	100.0%

4.4 Issues of Functional Imperatives

TNC Headquarters usually control key positions and power of appointment and removal for board chairman and CEO for their subsidiaries. More than 90% of the TNC subsidiaries reported to have an expatriate on these two positions. TNC parent companies also filled about half of their top-level executive positions such as vice general manager and the department heads through expatriates. The largest percentage of expatriates was in accounting, manufacturing, and R&D functions.

Strong TNC control of their Chinese subsidiaries is also reflected in the strength of the ties of these subsidiaries with their parent company, vs. other subsidiaries in the TNC network. Table 9 shows the index of the strength of ties is 3.75 on a 1 to 5 scale for the Chinese subsidiary-Headquarter link, and only 3.22 for the Chinese subsidiary-other subsidiaries link. TNC subsidiaries were highly dependent on their parent for frequent reporting, and access to technology and finance.

Table 9: Strength of Ties with Parent and with Other Subsidiaries

Strength of ties between the parent and subsidiaries	Mean	Strength of ties among subsidiaries	Mean
Dependence for financing	3.91	Deployment of funds among subsidiaries	3.06
Deployment of staff	3.18	Deployment of staff among subsidiaries	2.99
Dependence on parent Company for technology	3.94	Technical support and dependence	3.35
Dependence on the parent for raw materials and spare parts supply	3.72	Raw materials and spare parts supply among subsidiaries	3.30
Communication frequency	4.00	Communication frequency	3.40
Overall index mean	3.75	Overall index mean	3.22

Within the context of overall leadership centralization, TNCs striving to localize their strategy need to appropriately decentralize at least some functions. One indicator of the pressures to decentralize is the perceived likelihood of committing strategic blunders. The TNC subsidiary executives attributed these strategic blunders to the differences in the Chinese culture, lack of resources and support for adequate local adaptation from the parent TNC, and for adjustments in global strategy such as increased focus on the local market. To mitigate the risks of such blunders, marketing and human resources were also the functions where the TNCs tended to pursue a higher degree of localization, and granted more autonomy to their local Chinese subsidiaries. As shown in Table 10, with respect to their Chinese subsidiaries, the TNCs tended to localize their marketing and human resource functions, but centralize their R&D and finance functions.

Table 10: Localization of Various Functional Strategies

Function strategy	N	Mean	Standard deviation	% reporting localization to Be high or very high
HR localization strategy	99	3.68	0.946	62.7%
Marketing localization strategy	101	3.56	1.090	58.4%
R&D localization strategy	92	3.20	1.019	39.1%
Financial management localization strategy	85	3.06	0.956	34.2%

Note: 1 = very low, 5 = very high for localization.

4.4.1 Marketing

We found from our sample that greater emphasis on local markets was correlated with greater autonomy in marketing research and forecasting, choice of target markets, and product-focused advertising; while greater export orientation was correlated with a centralized role by the parent TNC in these areas. While centralizing, differences based on administrative heritage were observed. In general, the US TNC subsidiaries put a greater priority on controlling market research and forecasting, while the European subsidiaries sought control over product-focused branding. The export-focused and globally integrated Japanese and South Korean subsidiaries were more concerned about controlling their corporate image for long-term development.

4.4.2 Human Resources

With respect to the human resources function, the TNC parents allowed flexibility and freedom to decide of specific actions and measures for implementation while providing principles and guidelines in the form of human resource manuals and through expatriate appointment in the top leadership roles.

The TNCs subsidiaries were offered high autonomy in a range of activities pertaining to the human resources function, including staff recruitment, staff training, and job allocation and performance evaluation. TNC subsidiaries with more human resource function autonomy were able to modify rules and regulations before they became a source of confrontation. They were also able to adapt to local competitors' moves through appropriate human resource interventions and incentives to sustain employee efficiency and commitment.

4.4.3 Research and Development

Though the policy focus in China continues to be on encouraging the TNCs to transfer their know-how, market-based developments are forcing TNCs to re-evaluate their R&D centralization approach. The TNC subsidiaries are facing fierce competition from both local enterprises as well as other foreign TNCs in China. China's domestic enterprises have upgraded their R&D capabilities through access to advanced technology and equipment and purchase of patents. In order to compete with these firms, the TNC parents have been pushed to play the game of accelerated technology transfer to sustain subsidiaries' competitive position. Consequently, our interviews indicated that the TNC subsidiaries are being asked by their parents to increasingly participate in local technology and product innovation. These localization initiatives are intended to support adaptation to and penetration in both the local market and in the various global markets that they directly export to.

Increased autonomy in R&D appears to go hand-in-hand with some increased autonomy in the finance function. Given pressures on their corporate financing capabilities, TNCs are expecting their Chinese subsidiaries to generate local R&D capital primarily through internal accruals. As the subsidiaries become more involved in local R&D, they are allowed and encouraged to invest a greater share of their revenues into R&D and offered greater autonomy in R&D decision making. The process of offering increased R&D autonomy, however, appears to be carefully mothered in many cases. Especially during the initial R&D initiatives at a subsidiary, the parent TNCs tend to play an active role in identifying and approving smaller-scale R&D initiatives. Anecdotal interviewee reports suggested that such mentored localization of R&D has had a positive impact on the effectiveness of the R&D initiatives in China.

One of the unexpected benefits is an increased intensity and quality of direct relationships of Chinese with sister subsidiaries in other nations for sharing of knowledge and mutual communication. Administrative heritage of the TNCs accentuates the propensity of the firms to rely on decentralized learning networks – the European TNCs have a history of greater decentralized learning because of the diversity across different European nations; while the American TNCs have a history of more global integration because of a traditional emphasis on mass production.

Japanese TNC subsidiaries were likely to emphasize more on local innovation, than do the TNC subsidiaries from other nations, because of a greater degree of integration of the Japanese TNC subsidiaries with their headquarters, and a greater degree of exports of intermediate parts for further processing at the Japanese headquarters. Furthermore, the localization strategy also promotes a greater emphasis on multilateral inter-subsidiary links, versus centralized and dyadic parent-subsidiary links. In our sample, the European TNCs were more likely to emphasize knowledge exchange and mutual communication among their subsidiaries in China and other nations, as compared to the East Asian TNCs. The US TNCs were in between, possibly because of the opposing direction of the influences from the administrative heritage and the localization strategy. As shown in Table 11, survey results confirm that the Japanese and the European TNC subsidiaries are more likely to emphasize local innovation, than do the American and the Korean TNC subsidiaries.

Table 11: Local Innovation X Country Mean Difference Test

	Country				Variance test		Mean differences	
	U.S.	Japan	EU	Korea	p-value	t test	df	p-value
Product innovation	3.96	4.57			0.348	-2.83	35	0.008
	3.96		4.37		0.341	-2.14	40	0.038
		4.57		4.05	0.300	1.83	53	0.074
Management innovation	3.84	4.39			0.527	-2.57	41	0.014
Market innovation		4.44		3.91	0.048	2.65	46	0.011

4.4.4 Financial Management

Our data suggest that the financial management function has also been centralized in the TNC parents of the Chinese subsidiaries. Centralized financial management function went together with an emphasis on scale-oriented investment factors – specifically, expand production base, get more market share and maintain cost advantage in China.

These scale-oriented factors were easy to measure, quantify and implement, and were used by Chinese subsidiaries as key appraisal indicators for management decision choices and operation activities. The parent TNCs were often willing to assume low profitability, low rate of return and low cost reductions for fairly long periods on the assumption of a long-term commitment to China. The subsidiaries that realized positive growth in revenues and market shares were able to secure greater investment autonomy, including greater openness of the parents to their investment ideas.

To some extent, this meant that the subsidiaries tended to focus primarily on quantitative growth, such as scale of investment, revenues and market share and not so much on the profitability, rate of return and cost-effectiveness.

Overall

Overall, we found greater degree of strategic autonomy in a greater range of functional areas and within each functional area when the TNC subsidiaries were focused more on the domestic market. Conversely, when the TNC subsidiaries were focused more on playing a role of global factory, they had to work with greater levels of parental control and lower levels of localization.

5.0 Discussion & Conclusions

The TNCs that perceive Chinese subsidiaries primarily as a low-cost base and as a global factory are more likely to seek strategic control over their subsidiaries. In such cases, the subsidiaries are more likely to remain dependent for knowledge and technology and other critical resources on the parent company. The flow of knowledge will be predominantly one way – from the parent company to the Chinese subsidiaries. TNCs perceiving Chinese subsidiaries as strategic options to develop and penetrate Chinese market are more willing to support the development of indigenous competitive capabilities of these subsidiaries. Such Chinese subsidiaries are likely to become more capable to reciprocate with original knowledge development and share that knowledge with the parent company and with other subsidiaries in the TNC network.

Our findings suggest that when TNCs have access to the Chinese market demand, they are more willing to grant strategic autonomy to their local subsidiaries for innovation and indigenous capability development.

As the subsidiaries successfully develop local capabilities, the TNC parents are more willing to have them participate in more open sharing of know-how as part of a bilateral or even multilateral system of knowledge exchange throughout the TNC global network.

Greater access to the Chinese customers offers a platform to develop and sustain unique cost-effective capabilities for adapting to the customer demands.

Greater participation in the local market is associated with greater participation by the subsidiary in the inter-subsidiary knowledge system, which in turn opens a world of new opportunities for the subsidiary. When the factories only serve the fragmented needs of different and dispersed markets around the world –as in the Korean case, their weaknesses may be exposed and the opportunity may appear to be overwhelming. The exception may be when the Chinese factories are intended to serve highly specialized needs that are in low demand within China. This is akin to the Japanese case, where the TNCs use Chinese base as offshore linkage into their more complex value-adding home operations. However, in this case, the environment appears more threatening because of the accentuated dependencies on the parent TNC, idiosyncrasies of innovations and limited flexibility.

When TNCs do not have freer access to the local market demand, their subsidiaries organize their systems around the culture of borrowing and control from the parent company in a broad range of functional activities. Their ability to innovatively take on the sophisticated challenges for cost reduction presented by the Chinese market is constrained. They also lose opportunity to build a culture of prospector in the foreign nation – a culture that might allow for deeper indigenous innovation-based differentiation. Constrained openness of the Chinese markets results in lower attention paid to the development of deeper capabilities. The local marketing decisions focus on appropriate target markets, forecasting demand, and pushing products through advertising, rather than on brand management and product development. Similarly, in HRM more freedom is given to make local decisions, however expatriates dominate the senior positions, and without local role models in the senior positions, the motivation and the opportunities for skill development and for authentic local approaches are likely to be constrained.

The Western TNCs that have achieved high levels of penetration into the Chinese market tend to demonstrate a broader base of subsidiary competitive advantage followed by the Japanese TNCs who have integrated Chinese low-cost production base with their additional value adding high-end production base in Japan. The Korean TNCs that use the Chinese low-cost production base for serving different markets globally actually demonstrate very narrow level of subsidiary competitive advantage. In order to compete effectively in the Chinese market, the local subsidiaries need to have stronger and broader competitive advantage over their competitors.

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