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Integrating Managerial Pattern and Competitive Advantages: The Moderation of Competitive Inertia

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Abstract
In dynamic competition, the competitive inertia is determined by components both inside and outside of company. This paper investigated that, after integration, how can firm appropriately alter their integrating managerial pattern, according to competitive inertia, in order to achieve better advantages cause from integration. Through 10-year data of the oligopoly enterprises in air-conditioner industry in China, the analysis demonstrated that, improving flexibilities of integration managerial pattern helps to build differentiation advantages, while negative to cost advantages; while firm competitive inertia grew, systematicness of integration managerial pattern would have positive effects on differentiation advantages, while negative on cost advantages.

Key words: Integrating managerial pattern; Competitive dynamics; Competitive inertia; Competitive advantages

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INTRODUCTION
Competition is a unavoidable issue during growth of enterprises. For competing better and gaining larger advantages, most of enterprises decide to integrate horizontally or vertically. These integration strategies, most of which are crossing regions, help firms form the situation of multi-market competition (Edwards, 1955). While vertical integration often brings enterprises coordination and resources synergy between different sections in the value chain, then in competition they can complicate their actions, which are more likely to win. However, not all firm with integration have the same engagement, and achieve higher performance (Sirower, 1997). Enterprises after integration need an appropriate integrating management to run. When only inner management cannot gain the advantages, firms need cautiously plan the competitive repertoire.

Competitive repertoire refers to "actions pursued by an organization to attract, serve, and keep customers and is a novel way to examine a firm's strategy" (Miller & CHEN, 1996). While the inertia refers to the level of activities by a firm practicing differentiated competitive action in a repertoire (Miller & CHEN, 1994), the less inertia the stronger firm react with differentiated ways. Chen indicated that inertia has negative relationship with firm performance. But Chen ignored the interaction between inertia and patterns of management, simply decrease the inertia will cause higher management costs and risks. With the competitive environment growing dynamic and competitive inertia of a firm been pushed to low, what kind of managerial pattern can support the firm to adopt such flexible repertoire to engage bigger advantages? Till now, very few research involves the effects of managerial pattern designation to building advantages under a certain inertia.

This paper has mainly contributed on this problem on two dimensions: 1) analysed the repertoire and advantages of three oligopolies in the air-conditioner industry in China; 2) analysed the managerial pattern of the three companies basing on transaction costs theory (TCE), and figure out the interaction between inertia and patterns of management while effecting advantages.

1. INTEGRATING MANAGERIAL PATTERNS BASING ON TCE

1.1 Integrating Managerial Pattern and Its Basic Characters

The concept of "Integration" came from Follett (1987), after which the scholarship and entrepreneurs widely adopted. As integration contains various ways including allying and merger and acquisition (M&As), this paper focus on the integration strategies on those with M&As, both in horizontal and vertical. Managerial pattern refers to the managerial institutional system designed by organization manager (LI, 2003), therefore integrating managerial pattern refers to a set of managerial methods and process system adopted for solving key problems during the integration strategy. In fact, on another word, the integrating managerial pattern is basic characters of rules and institution, differ from those in other company, designed for horizontal or vertical integration by a company.

Though there are various reasons for integration, the fundamental objective of integration is gaining continuous advantages (LAN, 2007). To enhance competitiveness and maintain advantages, enterprises have to maximum scale and scope effects through integration, and meanwhile maintain the flexibility and sense of reaction in regional market (LAN, & PI, 2011). Therefore the basic goal of integrating managerial pattern is to effectively engage the synergy and to play the advantages from integration. To achieve so, there are two basic characters that integrating managerial pattern must achieve, in a certain extent:

Firstly, the systematicness of new organization after integration. There is a fresh new organizational boundary in horizontal or vertical after a company integrates with M&As. Thus how can engage the synergy of different resources and systematic operation in the new organization is the first problem that managerial pattern have to resolve. According to the researches, resources synergy after integration affects positively the growth of corporate performance (Campbell & Luchs, 1992; Brunsman *et al.*, 1998), while the biggest challenge to merger company is merger without integration--difficult to have all resources and departments coordination and cooperation after M&As (Ivancevich *et al.*, 1987; PI & LAN, 2011). In approach of dynamic competition, systematic allocation in different sections and regions helps enterprises to have more multi-point advantages (Edwards, 1955; Gnyawali & Madhavan, 2001).

Secondly, the flexibility of the new organization after integration. After horizontal or vertical integration, a organizational structure which contains headquarter and subsidiaries will be built, for united and control departments in different sections, regions, or even industries. And to different departments and subsidiaries, the top managers have to re-design their authorities and duties, which becomes the other problem that managerial pattern must face. As M&As extant the organizational scale and scope, then for more effective resources allocation by headquarter, more decision authorities should be gathered in top level, and the flexibilities of headquarter will be increased. As the decision process is longer by integration and organization growth, to maintain flexibility of subsidiaries, part of authorities should be handed down, so as to reduce the costs of headquarter, enhance the flexibilities and learning capabilities of the organization (WANG, 2003), and help technical and managerial innovation (Sonenshine, 2011).

1.2 Managerial Pattern Basing on TCE

Integrating managerial pattern, as its definition, is an abstract concept, which is hard to directly measure with a comprehensive index. Transaction cost theory can describe and analyse institution in perspective of costs in transaction behaviour, thus the two characters of managerial pattern, can be analysed with TCE.

In approach of TCE, the systematicness comprehensively represents the inner transaction costs (TCs). If the systematicness after integration is low, then the coordination between different department and section will be weak. Thus there will be more wastes, faults, problems for negotiation between managers, and even issues required decided by top mangers in inner procedure, which means higher inner TCs. On contrast, if a more systematic managerial pattern are designed, with clear duties and authorities for each department and position, then the coordination will be higher, and inner TCs will be low down. Therefore, inner TCs can be a measuring index for the systematicness of integrating managerial pattern.

The flexibilities of managerial pattern can be represented by the sharing of inner TCs between headquarter and subsidiaries. According to Agent Theory (Mayer & Salomon, 2006), relationship between headquarter and subsidiaries is a certain of bargaining relationship, which can be regarded as a transaction on managerial authorities and information between managers in the two levels. When other condition stay, the sharing of inner TCs between the two management levels is directly upon the extent and content the managerial authorities are separated, thus revealing the flexibilities. When headquarter gathers more authorities up and control more operation and information, gaining more flexibilities, it also has to cover the more inner TCs, including searching,

analysing, planning, negotiating, and communicating. Vise versa. Therefore sharing TCs between headquarter and subsidiaries can measure the character of flexibilities of integrating managerial patterns.

Notice that, the two characters of integrating managerial pattern have to be "fit". Over systematicness will cause an weaken in flexibilities (either in headquarter or subsidiaries); while over flexibilities may lead company into disperse. Therefore, managerial pattern should be fit for context of competition, industrial development, and so on.

2. HYPOTHESIS

According to the analysis above, systematicness of integrating managerial pattern emphasizes the coordination and cooperation between departments after integration, thus the more systematic, the higher effectively, lower costs and faster reaction enterprise competes, which driving to build differentiation advantages by searching diversified demand and market segment. On the other hand, flexibilities emphasizes authorities allocation to regional subsidiaries after integration, so that differentiation advantages can be build basing on different regional situation. Though, chasing either systematicness or flexibilities causes operating costs increases, and weaken the costs advantages building.

H1a: Systematicness of integrating managerial pattern has positive influence to differentiation advantages building.

H1b: Flexibilities of integrating managerial pattern has positive influence to differentiation advantages building.

H1c: Flexibilities of integrating managerial pattern has negative influence to costs advantages building.

H1d: Systematicness of integrating managerial pattern has negative influence to costs advantages building.

While industry increases dynamics, enterprises with different characters will react with different competitive repertoire which with various inertia. The higher the inertia, the less flexible the repertoire enterprises adopted. Without flexibilities in repertoire, the flexibilities in organization will turn to be a weakens which cause more difficulties in building either differentiation or costs advantages. On the other hand, the higher inertia, the more effective protection brought from systematicness. When inertia is high, enterprises are actually repeating some similar actions. Thus if inner management is systematic, costs could be reduced and efficiency could be improved, and advantages could be easier to engage.

H2a: While competitive inertia grows, the effects of flexibilities of integrating managerial pattern to differentiation advantages building will be weakened.

H2b: While competitive inertia grows, the effects of systematicness of integrating managerial pattern to differentiation advantages building will be improved.

H2c: While competitive inertia grows, the effects of systematicness of integrating managerial pattern to costs advantages building will be improved.

H2d: While competitive inertia grows, the effects of flexibilities of integrating managerial pattern to costs advantages building will be weakened.

3. SAMPLE AND DATA

3.1 Sample

We have chosen the Chinese air conditioner market as the industry sample. The air conditioning industry is one of the industries which considered to be with higher degree of marketization. In the air conditioning industry, the concentration of competition is also high. From 2008 to 2009, the market share of Gree, Midea and Haier accounted for nearly half of China's air conditioner market. Our sample objects are the annual competitive behavior, management model and competitive advantage. The sample data comes from three aspects:

- Retrieve and collect the news reports of the three giants of air conditioning industry: Gree, Midea, Haier related to competitive behavior from 2001 to 2010 through Infobank Economic News. And use the structured content analysis method (Miller & CHEN, 1996) to analyze which have learnt from Ming-Jer Chen, etc. Ultimately, we identified and collected 268-competitive behavior reported in the past 10 years of the three companies.
- We used the scale following a number of scholars (Chandler G, & Hanks SH, 1994; Kaleka & Berthon, 2006; LI & ZHOU, 2010; Song & ME, 1997; Narver & Slater, 1990; Tomaž ýater, Barbara ýater, 2009; SUN, 2007) to measure competitive advantage. We completed the measurement through the expert scoring for the three companies' Board Report section in the company's annual report from 2001 to 2010. "Board Report" is an overview of the strategic focus and main business activities during the reporting year. The "Board Report" of listed companies reflected the firm's major focus and achievements in this year. We scored by reading this part to observe the length (The longer the length, the more prominent) of related content and the order (The more front it sort, the more prominent and more important it is) of different keywords, such as cost, quality, and innovation in the report.
- We get the data which used to measure the systematic and flexibility of enterprises' integrated management model through the financial reporting data in the annual reports of listed companies.

3.2 Variable

Dependent variable: competitive advantage. Porter argued that the enterprise may have two types of competitive advantage: differentiation and cost advantages. In this study, the measure of competitive advantage is divided into the measure of differentiation and the measure low cost which following the Porter's view. The scores of the two variables are the average scores of scale in the overall measure and various aspects of measure.

Independent variables: the integrated management model. According to the discussion of Section II, the systemic of integrated management model can be measured through the internal transaction costs, and the flexibility can be measured through the sharing of internal transaction costs by headquarters and divisions. Although transaction costs can't be directly measured accurately, but the cost of enterprise management can be used as substitution variables of the internal transaction costs. So we used the management fees and finance charges (combined number) in the annual reports of listed companies to measure the total management costs. Taking into account that different companies have different size and different degree of differentiation, only use the management cost can't explain the systematic of enterprises' integrated management. So in this article, enterprise management cost was divided by the enterprise operating income to remove the impact of other factors. In addition, we measure the apportionment of the internal transaction costs by the ratio of the parent company's and the merger management fees and finance charges in the annual reports, to express the degree of centralization of enterprises' integrated management. The reverse interpretation of the centralization degree is the degree of flexibility.

Competitive inertia: Competitive inertia refers to the level of activity that a firm demonstrates in altering its competitive stand. It reflects the number of market-oriented changes a company makes in trying to attract customers and outmaneuver competitors. (Miller & CHEN, 1994).

This article uses the activity index to measure the competitive inertia, which followed the methods of measurement of Miller and Chen (1994). Assume in year t, the number of decision-making to take a j type action for a certain i company is $x_{i,j,t}$. Each year, the number of different types of decision-making is different. So all companies' and all years' $x_{i,j,t}$ value were standardized to $z_{i,j,t}$. Sum the standardized scores $z_{i,j,t}$, divided by the logarithmic of business operations scale, and then seek the logarithm, this variable showed normal distribution:

$$ActivityIndex = \ln\left[\left(\underset{j}{sum}\, z_{i,j,t}\right) / \ln\left(OperationScale_{i,t}\right)\right] \quad (1)$$

Value the activity index in the opposite symbol, in order to measure the competitive inertia.

4. RESULTS

Using SPSS 16 to analyse the data, the Pearson Correlation analysis, as Table 1, indicates that, the differentiation (Dg) and costs (Cg) advantages exist negative relationship, which testifies the ideal of enterprises should focus one single advantage to build by Porter (1985). While the correlation between differentiation advantages and the three independent variables (RatioTC, HQTC, and Inertia) are not supported, costs advantage has significantly positive relationship with headquarter control (HQTC).

To testify the hypothesis, an ANOVA was applied, with the result reported in Table 2. In Model 1, influence of inner TCs (RatioTC) to differentiation advantages is not significant, thus H1a is not supported. And headquarter TCs sharing (HQTC) has significantly negative influence (-0.566, p=0.045) to differentiation advantage, which means that the more flexible integration management is, the easier to build differentiation advantages. H1b is supported. In Model 2, comparing to Model 1, influence of inner TCs to differentiation turns to significantly positive (1.562, p=0.033), while the influence of headquarter TC sharing to differentiation advantage is not significant. Therefore, H2b is supported, but H2a is not.

In Model 3, inner TCs has insignificant effects to cost advantage, while headquarter TCs sharing has significantly positive effects (0.637, p=0.021) to cost advantage. This demonstrates that the more flexibly enterprises manage after integration, the harder to build costs advantages. Therefore, H1c is supported while H1d is not. In Model 4, comparing to Model 3, the influence of inner TCs to costs advantage turns to significantly negative (-1.332, p=0.038), revealing that, when the inertia is high, systematicness of integrating management will weaken cost advantage building. Meanwhile, the effects of headquarter TCs sharing to cost advantage is stronger, but not significant. So, H2c is support but H2d is not.

Table 1
Correlation of Variables

	Dg	Cg	RatioTC	HQTC	Inertia
Dg	1	-.485**	.154	-.351	.234
Cg	-.485**	1	-.289	.488**	.103
RatioTC	.154	-.289	1	-.762**	-.011
HQTC	-.351	.488**	-.762**	1	.024
Interia	.234	.103	-.011	.024	1

a. **. P < 0.01 level (2-tailed)

Tabel 2
AVONVA Result

	Dg		Cg	
	Model 1	Model 2	Model 3	Model 4
RatioTC	-0.275	1.562*	0.198	-1.332*
HQTC	-0.566*	0.164	0.637*	0.744
Inertia	0.245	-3.867*	0.09	3.154*
RatioTC*Inerita		4.044**		-3.536**
HQTC*Inerita		0.983		0.081
F	2.357	3.368	3.094	5.725
Sig.	0.095	0.019	0.044	0.001

a.*.p<0.05 level (2-tailed); **. P<0.01 level (2-tailed).

5. DISCUSSION

For a long time, how the interaction between enterprise managerial mechanism designation and competitive behaviour influence performance has been controversy. This paper attempts to explore this issue, with data from China's air conditioner industry, in approaches of competitive dynamics and integrating managerial patterns. Competitive inertia is caused by many reasons including environment and competitor behaviour, while managerial patterns is comparatively closed system designed by managers after deep thinking, and altered according to different competition stage. For strategies is for gaining advantages, then integration managerial pattern supports the advantage building. Flexibilities of integrating management has more or less positive effects on both differentiation and costs advantages biulding. If company wanted to increase systematicness to gain differentiation advantages, they would have to boost inertia, to same cots, improve efficiency of organization learning (March, 1991), and avoid interrupting customers and competitors (Amburgey, Kelly, & Barnett, 1993). On the other hand, for special reasons like regional differences in China, when inertia is high, company should not chase systematicness of integration management too much, so as to help building costs advantages.

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