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## Competitive Strategy Trends among the Malaysian Wooden Furniture Industry: An Strategic Groups Analysis

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**Abstract:** The competitiveness indexes of the Malaysian furniture industry are declining regardless of the strong growth of the over two last decades. Although there are nominated factors to analyze this conflict from resource based view, other factors from competitive strategy view should be considered to attain a comprehensive image of the industry's structure in the current situation. This study developed a strategic group analysis based on Porter's competitive business level strategy to examine the industry structure and its likely association with the current situation of the industry as well strategic trends in the future. The obtained results demonstrated that: There are at least four logical strategic groups in the industry. Major groups that form main body of the industry do not pursue a distinctive competitive strategic orientation and so the industry is placed in a fragile position in terms of the competitive strategy. The industry is significantly under force from intensive competition and bargaining power of buyers. Differentiation is the most efficient and Cost leadership is the least efficient strategy in the industry. The industry significantly attempts to develop its strategic activities toward distinct strategic orientations in general and differentiation more than two other competitive strategic orientations. Hence, moving from dispassionate groups toward differentiation group will be main strategic effort in the future of the industry.

**Key words:** Furniture industry, strategic groups, competitive strategy, competitive forces, wood products

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### INTRODUCTION

The wooden furniture industry in Malaysia has made impressive progress as the timber sector has been moving towards downstream processing activities with the launch of the First Industrial Master Plan in 1986 (Farrokhpayam *et al.*, 2010). Given that the Malaysian furniture industry development is based on foreign markets, after two decades, Malaysia has emerged as one of the major suppliers in the world furniture market (Ratnasingam and Lim, 2008). Despite impressive growth during the last two decades, the Malaysian wooden furniture industry currently has been facing with cumulative decline in export growth rate as well as in some other competitiveness indexes (Ratnasingam, 2002a; Bu, 1999).

To analyze the problem scholars mostly developed a migration strategy approach to explain the current situation of the industry and referred to overwhelming OEM manner among the manufacturers as origin of emerging the problem (Shahwahid *et al.*, 1995; Jahaya, 1997; Bu, 1999; Ratnasingam, 2000; Ratnasingam and Lim, 2008). At the same time as some of same scholars also

referred to being placed the industry in maturity stage in terms of its approach to the global market (Ratnasingam, 2002b; Bu, 1999). Both two approaches have highlighted limitation of the industry resources and capabilities as origin of the situation that implies to follow a resource-based view from the scholars. while there are many evidences which show intensive competition is a cumulative factor driving the industry environment (Jahaya, 1997).

While the Resource-Based View (RBV) on firm's competitiveness and performance emphasizes firm's internal resources and capabilities (Barney, 2001; Barney *et al.*, 2001), the competitive strategy view states that a firm's competitiveness and so its performance is determined by the characteristics of the competition environment and firm's ability to achieve a powerful strategic position through planned effective competitive strategies namely Cost leadership, Differentiation and Focus (Porter, 1980). In fact, RBV and competitive strategy view are two complementary views that provide a comprehensive image of an industry in terms of competitiveness (Ortega and Garcia-Villaverde, 2008; Ortega, 2009). In this manner, to accomplish a structural

analysis based on competitive business level strategy will provide a comprehensive image of the industry structure and a reliable explanation of the stated situation.

Structural analysis of the industry based on the competitive strategies not only reveals the underlying strategic trends but also makes feasible to identify major strategic groups in the industry. In this manner, the strategic group concept in Porter's typology plays a powerful tool role that facilitates structural analysis of the industry based on competitive strategies (Linder and Seidenstricker, 2010).

According to Porter (1980), the strategic group concept is an investigative tool planned to support in structural analysis. In fact, it has a mediator role of position between considering the industry as a group and looking at the firms individually (Alsamydai *et al.*, 2010). The competitive strategy which will be followed, is derived through the firms' recourses and abilities and so it is conceivable that firms which pursue parallel strategies, are probable to enjoy similar resources and capabilities (Linder and Seidenstricker, 2010). This theory agrees to classify the firms in an industry into specific groups that are strategic groups. Thus, each group contains similar companies and this similarity of the firms in the group makes the industry's analysis easier in terms of number of firms should be observed. Hence, the strategic group theory presents a more effective approach into the industry analysis. Furthermore, characteristics of the identified groups can be employed as an analytical device for additional investigation into the industry.

Even though the earlier studies on strategic groups were driven to examine the distinct structures from data, the following studies are more driven to identify the existence and importance of strategic groups (Tang and Thomas, 1992; Fiegenbaum and Thomas, 1993; Peteraf and Shanley, 1997). With these developments on the strategic group's theory, a rising acknowledgment has appeared which scholars should take notice that it signifies that performance differs across the strategic groups (Dranove *et al.*, 1998; Wiggins and Ruefli, 1995).

Consequently, the strategic group's analysis provides a wealthy source of information beyond that of an ordinary classification which sorts the firms into tactically similar groups (Alvarez, 2004). Ultimately, the concept of strategic groups has turned into a basic subject in the field of strategic management and thus strategic marketing due to its capability is able to clarify the dynamics of competitive strategy (Leask and Parker, 2006). It is now a key theory to understand the strategic trends in the competition environment and developing competitive strategy (Menon, 2010).

There are several studies on strategic groups in the wood-based industry based on competitiveness variables which are related with Porter's competitive business level strategies. O'Laughlin and Ellefson (1981a-c) evaluated the structure of a group of firms from several U.S. wood-based industry which includes lumber manufacturing, paper and pulp producing and wood household furniture manufacturing. Cleaves and O'Laughlin (1986a, b) investigated the business-level strategy among U.S. Plywood producers and identified five strategic groups among them. At the same time, Rich (1986) examined the corporate-level proposed competitive strategies among large-size wood-based firms in the U.S. and classified them using one or a combination of Porter's generic strategies. Bush and Sinclair (1991) examined the competitive business level strategy in the hardwood lumber industry through identifying strategic groups among U.S. hardwood lumber manufacturers. Wan and Bullard (2008, 2009) investigated Porter's generic strategies among the U.S. upholstered, wood household furniture industry and identified four strategic groups in the industry.

In this study, we employed Porter's typology on the competitive strategy and strategic group's concepts to evaluate strategic trends among the industry and classify the Malaysian wooden furniture manufacturers who are involved in exports into the strategic groups. This provides possibility to attain the map of strategic groups which determine major strategic orientations in the industry in the current and future time.

Moreover, we evaluate likely difference of performance among the strategic groups and perception of each group to the five competitive forces which are presented by Porter (1980). This provides an evolved approach and evaluation of the industry's strategic trends and explains both the current situation and the future changes. In this way, presented hypothesis in above will be examined.

## **MATERIAL AND METHODS**

The same as Porter (1980) discussed in his description of strategic groups, we can employ definite dimensions (variables) that are regarded to be of great importance for the firms' capability and success. These variables or strategic activities can be contemplated as the framework of the pursued strategy. Given that these variables determine the firms' capability, they are the factors that the firms have to get moving to achieve the strategy. In other words, firms' actions describe their competitive strategy; consequently we can suppose the companies' competitive strategy by investigating their approach toward the strategic dimensions.

**Measurements and variables:** A four parts questionnaire is developed as the research instrument for this study. The questionnaire is consisting of: Competitive forces, Competitive business level strategy, Performance data and the company's back ground. A total of 23 planned items were adapted from previous studies (Stalk, 1988; Bush and Sinclair, 1991; Vesey, 1991; Suri, 1999; Wan and Bullard, 2008, 2009) for the competitive business level strategy construct. Planned items consist of 9 items representing Cost leadership, 7 items representing Differentiation and 7 items representing Focus strategy are presented in Table 1. A seven point Likert scale measuring the strength of attitudes with a statement was used to measure strategy. To measure strategy, firms were asked to rate the importance of each item (above-mentioned 23 items) in their firm's current strategy and in their firm's strategy for the next five years, respectively.

To measure competitive forces the firms were first asked to rate the significance of each competitive force faced by the firms in the industry and then rank the five competitive forces in order of importance. To measure performance, profitability measures were used in this study, these captured the gross profit percentage for the years 2005-2008. To avoid non-response due to the sensitivity of this data, firms were asked to check the interval, not to fill in the exact percentage of gross profit for the four years.

**Data collection:** The population of this study was the Malaysian manufacturers of wooden furniture (SITC

**Table 1: Strategic activities (tactics) of Porter's competitive strategies**

Strategies	Details
Cost leadership	<ul style="list-style-type: none"> <li>• Improving efficiency of production facilities</li> <li>• Having well trained production personnel</li> <li>• Offering a lower price than competitors for similar quality products</li> <li>• Procurement and use of lower cost raw materials</li> <li>• Obtaining necessary capital at low cost</li> <li>• Investing in new processing equipment</li> <li>• Manufacturing products with mass appeal</li> <li>• Low-cost distribution system</li> <li>• Reducing lead times</li> </ul>
Differentiation	<ul style="list-style-type: none"> <li>• Developing recognizable brand name</li> <li>• Using new marketing methods</li> <li>• Controlling channels of distribution</li> <li>• Research for new product design and development</li> <li>• Providing better customer service than competitors</li> <li>• Having a reputation of quality</li> <li>• Bringing new products faster than competitors</li> </ul>
Focus	<ul style="list-style-type: none"> <li>• Concentrating marketing toward certain geographic areas</li> <li>• Manufacturing customized products for individual consumers</li> <li>• Targeting particular customer groups</li> <li>• Competing in niche markets</li> <li>• Developing/maintaining customer loyalty</li> <li>• Focusing on high price point products</li> <li>• Focusing on promotional or low price point products</li> </ul>

821.16 and 821.5) involved in export. A total of 272 companies were identified as the population of the study and so the mail survey included 272 companies (<http://www.malaysia-furniture.com/>). In July 2009, a total of 272 questionnaires were mailed to top managers of the identified companies. Of the total, 23 questionnaires were returned because of bad mailing addresses and one was not a manufacturer in the industry. A total of 63 responses which included 60 useable responses and 3 unusable responses were obtained. The response rate therefore was 24.09%.

**Response bias and outliers tests:** A non-response bias test was conducted by testing differences between the means of 24 respondents of the initial mailing, 30 respondents of the second and 9 respondents of the third follow-up mailings (Armstrong and Overton 1977, Aiken, 1988). Wilks's MANOVA test criterion (Johnson and Wichern, 2007) was employed to test at the 0.05 level of significance for the difference in the mean scores. Subscales of the three competitive strategies (23 items) form three groups and each group represented a single multivariate response for each company. The null hypothesis was that the three groups means for all 23 response variables were equal ( $H_0: \mu_1 = \mu_2 = \mu_3$  versus  $H_1: \mu_1 \neq \mu_2 \neq \mu_3$ ). Non-response bias was found to be statistically significant (at  $\alpha = 0.05$ ). The results of this multivariate test of non-response bias were  $p > 0.05$  and  $H_0$  was accepted. Non-response bias did not exist in this study. Further statistical data analysis for the survey responses was carried out only after the test of means was not significant and there was an absence of non-response bias. In the next step the robust squared distances (RDSQ) technique and the plot inserted in SAS software that is most useful in analyzing the multivariate data employed to identify and eliminate outliers (Khattree and Naik, 1999). After three runs of RDSQ, two outliers were identified and deleted from further statistical data analysis. Subsequent steps of data analysis were implemented on 58 respondent's data.

**Analytical method:** A comparison between current and future strategic activities of an industry reveals the industry's trend in terms of competitive strategy. In order to present the difference between the current and the next five years of strategic activities, the mean of the respondents' scores for current and future strategic activities were computed in the first step. The rank of strategic activities was ordered from the highest to the lowest (Table 2). After computing and ordering the mean scores responded by each company for current and future strategic activities, the following study was conducted to identify the changes between the current and the future

**Table 2: Mean of current strategic activities**

Current strategic activities	Mean	Min.	Max.	Rank
Improving efficiency of the production facilities	5.93	4	7	1
Research for new product design and development	5.89	3	7	2
Having a reputation for quality	5.87	4	7	3
Developing/maintaining customer loyalty	5.60	2	7	4
Providing better customer services than competitors	5.57	3	7	5
Having well trained production personnel	5.46	2	7	6
Bringing new products to market faster than competitors	5.38	2	7	7
Obtaining necessary capital (Finance) at low cost	5.24	2	7	8
Reducing lead times	5.07	2	7	9
Procurement and use of lower cost raw materials	5.05	2	7	10
Manufacturing products with mass appeal	4.57	1	7	11
Using new marketing methods	4.57	2	6	12
Targeting particular customer groups	4.55	3	6	13
Developing a recognizable brand name	4.41	1	6	14
Investing in new processing equipment	4.29	2	6	15
Offering a lower price than competitors for similar quality products	4.14	1	7	16
Manufacturing customized products for individual consumers	4.12	2	6	17
Concentrating marketing on certain geographic areas	4.02	2	6	18
Using low cost distribution system	3.96	1	7	19
Competing in niche markets	3.93	1	6	20
Controlling channels of distribution	3.81	1	6	21
Focusing on high price products	3.36	1	6	22
Focusing on promotional or low price products	3.13	1	7	23

strategic activities. To compare the mean scores of the current and the next five years of strategic activities of each company and to obtain the predicted changes in the industry, Hotelling paired  $T^2$  test (Johnson and Wichern, 2007) was conducted first at the 0.05 level of significance, to look for an overall difference between the mean scores of 3 pairs strategies (overall mean scores of each strategy's tactics at the current and future), 9 pairs tactics of Cost Leadership Strategy, 7 pairs tactics of Differentiation Strategy and 7 pairs tactics of Focus Strategy based on the mean scores responded by each company. A follow-up paired t-test then identified which specific strategic activities were significantly different for the next five years (Johnson and Wichern, 2007). In order to identify which particular tactics or strategic activities were significantly different for the next five years, paired t-test was conducted (Table 3).

In addition, based on the mean scores of the responses for each tactic (strategic activity) and the mean scores of each group of tactics that present a distinctive competitive strategy, the difference and importance of the three competitive strategies in the current and the next five years were investigated. To determine if the companies in the industry pursue the distinct competitive strategy an analysis of variance (ANOVA) was applied to test the null hypothesis:

**Table 3: Changes of strategic activities over the next five years**

Strategic activities (Tactics)	Difference of Mean	p-Value	Rank
Using new marketing methods	1.0517241	<0.0001	1
Developing a recognizable brand name	0.9827586	<0.0001	2
Controlling channels of distribution	0.8448276	<0.0001	3
Investing in new processing equipments	0.8275862	<0.0001	4
Manufacturing customized products for individual consumers	0.5689655	<0.0001	5
Focusing on high price products	0.5689655	0.0007	6
Reducing lead times	0.4482759	0.0009	7
Bringing new products to market faster than competitors	0.5862069	0.0010	8
Competing in niche markets	0.6551724	0.0016	9
Having well trained production personnel	0.3448276	0.0046	10
Research for new product design and development	0.3793103	0.0050	11
Concentrating marketing on certain geographic areas	0.3620690	0.0154	12
Having a reputation for quality	0.2586207	0.0540	13
Developing/maintaining customer loyalty	0.1896552	0.0547	14
Focusing on promotional or low price products	0.3448276	0.0604	15
Procurement and use of lower cost raw materials	-0.2068966	0.1094	16
Using low cost distribution system	0.1551724	0.3333	17
Providing better customer services than competitors	-0.1206897	0.3407	18
Obtaining necessary capital (Finance) at low cost	0.0862069	0.4397	19
Manufacturing products with mass appeal	-0.1034483	0.5851	20
Improving efficiency of the production facilities	0.0344828	0.6586	21
Targeting particular customer groups	-0.0689655	0.6804	22
Offering a lower price than competitors for similar quality products	-0.0172414	0.9176	23

**Table 4: Differences among three competitive strategies (Generic strategies) in the current and the next five years in particular**

3 Competitive strategies	The current			The next 5 years		
	Duncan* grouping	Mean	N	Duncan grouping	Mean	N
Differentiation	A	5.0747	58	A	5.6421	58
Cost leadership	A	4.8591	58	B	5.0310	58
Focus	B	4.102	58	C	4.4784	58

\*Difference of means with the same letter is not significant (at  $\alpha = 0.05$ )

$$H_0: \mu_{7 \text{ Differentiation tactics scores}} = \mu_{9 \text{ Cost leadership tactics scores}} = \mu_{7 \text{ Focus tactics scores}}$$

for the current time and the next five years. Furthermore, to determine which competitive strategy (s) was/were significantly different from the companies in the industry in the current and the next five years and to rank the importance of the competitive strategy to the companies, a Duncan's multiple range test was applied (Table 4).

**Identification of strategic groups:** With the purpose of identification of strategic groups among the respondent companies in this research, the factor analysis technique was employed to attain major factors of strategic activities and then the cluster analysis based on the obtained factor

loading was implemented to identify the strategic groups (Johnson and Wichern, 2007). To implement factor analysis the principal component (and the related principle factor) that is one of most popular methods of determining the relationship of the factor model employed. The factor analysis was used to examine the 23 strategic variables (strategic activities or tactics) for the current time. The answers from the principle component method was obtained and rotated and according to Johnson and Wichern (2007), the variables with high factor loading (more than 0.4) were then grouped into four factors. In this process, one of the variable or strategic activities (Improving efficiency of the production facilities) was omitted because of low factor loading (Table 5).

Based on the calculated factor scores, the second stage involved Cluster analysis to identify strategic groups. Cluster analysis is a multivariate method used to classify individuals, based on the characteristics they possess, into uniquely defined groups so that each individual is very similar to the others in the group. There are two basic procedures to search for clusters: hierarchical clustering procedure and nonhierarchical clustering procedure (Johnson and Wichern, 2007). The nonhierarchical clustering is criticized for having some major problems due to its decision-based and no tree like structure. Accordingly, hierarchical clustering methods that are avoided from the problems commonly are preferred. Ward's method is one of the best hierarchical clustering methods that has been specified in wide range of earlier researches (Punj and Stewart, 1983) and is the most theoretically fitting to identify strategic groups

(Bush and Sinclair, 1991). Ward's clustering method that is named Ward's minimum variance method seeks to minimize the sum of squared within-cluster distance (Johnson and Wichern, 2007). In this study, the Ward's method from the hierarchical clustering procedure was applied to classify the respondent companies into strategic groups. Figure 1 presents the diagram of the four strategic groups in the industry and Table 6 presents strategic activities of each group as indicators of their strategic dimensions.

**Perception to the competitive forces in different strategic groups:**

In order to assess how the respondent companies in the identified strategic groups perceived the five competitive forces firstly multivariate analysis of variance (MANOVA) at the 0.05 level of significance was implemented to evaluate significant differences among the mean scores of the five competitive forces between the strategic groups. Furthermore, to determine how the companies in each strategic group perceives the five competitive forces, a Duncan's multiple range test was applied to rank the five competitive forces in each

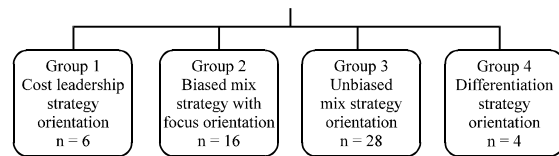


Fig. 1: Four identified strategic groups among the Malaysian wooden furniture industry in the export segment

Table 5: Four strategic orientations

Strategic variables	Factor Loading			
	Cost leadership (Factor 1)	Mix focus oriented (Factor 2)	Mix unbiased (Factor 3)	Differentiation (Factor 4)
Procurement and use of lower cost raw materials	0.86290	-0.13419	-0.07228	0.05070
Manufacturing products with mass appeal	0.84052	-0.22302	0.05076	-0.16731
Obtaining necessary capital at low cost	0.76676	0.12904	-0.02695	-0.41202
Using low cost distribution system	0.75618	-0.36341	0.25065	-0.09366
Offering a lower price than competitors for similar products	0.72654	-0.08042	-0.40301	-0.12954
Targeting particular customer groups	0.68153	-0.14844	-0.23108	-0.36385
Competing in niche markets	-0.09389	0.75762	0.00673	-0.33941
Manufacturing customized products for individual consumers	-0.13832	0.68679	0.01989	0.25292
Developing a recognizable brand name	-0.05329	0.66235	0.28971	0.00131
Investing in new processing equipment	0.03982	0.60447	0.03706	0.26032
Concentrating marketing on certain geographic areas	0.46859	0.58669	0.25913	0.32867
Reducing lead times	-0.13827	0.57706	-0.01602	0.15698
Using new marketing methods	-0.28526	0.54694	0.40697	-0.21252
Providing better customer services than competitors	-0.34312	0.54403	0.48876	-0.05471
Focusing on high price products	-0.12720	0.45399	0.05665	-0.09498
Targeting particular customer groups	-0.20387	0.45265	-0.23408	0.36746
Having a reputation for quality	0.10281	-0.05805	0.87357	-0.06432
Having well trained production personnel	-0.03353	0.32599	0.80932	0.13302
Developing/maintaining customer loyalty	-0.28601	0.06259	0.56348	0.30242
Bringing new products to market faster than competitors	-0.16722	0.28933	0.27363	0.70703
Controlling channels of distribution	-0.19414	-0.03100	0.23877	0.51358
Research for new product design and development	0.15494	0.06754	0.30079	0.46148

The negative loadings are caused by questions that are negatively oriented to the factor

**Table 6: Similar strategic activities and strategic dimension of the identified groups in the Malaysian wooden furniture industry in the export segment**

Strategic group	Strategic dimension
Cost leadership orientation	Obtaining necessary capital (Finance) at low cost Offering a lower price than competitors for similar quality products Procurement and use of lower cost raw materials Using low cost distribution system Manufacturing products with mass appeal
Mix strategy focus orientation	Focusing on promotional or low price products Focusing on high price products Concentrating marketing on certain geographic areas Manufacturing customized products for individual consumers Targeting particular customer groups Competing in niche markets Providing better customer services than competitors Developing a recognizable brand name Using new marketing methods Reducing lead times
Mix strategy unbiased orientation	Investing in new processing equipments Having a reputation for quality Having well trained production personnel Developing/maintaining customer loyalty
Differentiation orientation	Research for new product design and development Controlling channels of distribution Bringing new products to market faster than competitors

**Table 7: Differences among the five competitive forces in different strategic groups**

Rank	Competitive forces	Duncan grouping*	Mean	N
<b>Group 1 (Cost leadership strategy orientation)</b>				
1	Bargaining power of buyers	A	6.000	6
		A		
2	Intensity of rivalry between existing competitors	A	6.000	6
3	Bargaining power of suppliers	B	5.000	6
4	Threats of substitute products	C	3.000	6
		C		
5	Threats of new entrant competitors	C	3.000	6
<b>Group 2 (Mix strategy with focus orientation)</b>				
1	Intensity of rivalry between existing competitors	A	5.1250	16
2	Threats of new entrant competitors	B	4.1250	16
		B		
3	Bargaining power of suppliers	B	3.9375	16
		B		
4	Bargaining power of buyers	B	3.5625	16
		B		
5	Threats of substitute products	B	3.2500	16
<b>Group 3 (Mix strategy orientation)</b>				
1	Intensity of rivalry between existing competitors	A	6.2143	28
		A		
2	Bargaining power of buyers	A	5.6429	28
3	Bargaining power of suppliers	B	4.7857	28
		B		
4	Threats of new entrant competitors	B	4.7500	28
5	Threats of substitute products	C	2.6786	28
<b>Group 4 (Differentiation strategy orientation)</b>				
1	Intensity of rivalry between existing competitors	A	5.3750	8
2	Bargaining power of suppliers	B	3.8750	8
		B		
3	Bargaining power of buyers	B	3.5000	8
		B		
4	Threats of new entrant competitors	B	3.5000	8
5	Threats of substitute products	C	2.2500	8

\*Difference of means with the same letter is not significant (at  $\alpha=0.05$ )

strategic group from the highest to the lowest mean scores and verify significant difference between the mean scores of competitive forces (Table 7).

**Table 8: Differences of performance in different strategic groups in particular Duncan grouping\***

Difference of means at 0.05	Performance average	N	Strategic group	Rank
A	17.18	8	Differentiation orientation	1
A				
A	16.12	16	Mix strategy unbiased orientation	2
A				
A	13.94	28	Mix strategy focus orientation	3
B	7.54	6	Cost leadership orientation	4

\*Difference of means with the same letter is not significant (at  $\alpha=0.05$ )

**Differences of performance among the strategic groups:**

In order to determine if the averages of the firms' performance in different strategic groups are significantly different, a multivariate analysis of variance (MANOVA) to test at the 0.05 level of significance for a difference of means was used for the statistical analysis. Then a Duncan's multiple range test was implemented to determine the rank and differences of each strategic group performance (Table 8).

**RESULTS**

**Changes in strategic activities during next five years:**

After comparing the mean scores of the current and the next five years of strategic activities of each company and obtaining the predicted changes in the industry, the results demonstrated that there was a significant overall difference between the current and the next five years of strategic activities (Table 2, 3). These results put forward that a change in the 12 of 23 tactics is probable during the next five years (Table 3; 1 to 12). In other words, manufacturers in the industry are going to increase their efforts in each of the 12 tactics over the next five

years. Using new marketing methods, developing a recognizable brand name, controlling channels of distribution, investing in new processing equipments, Manufacturing customized products for individual consumers and focusing on high price products are top six strategic activities that will not be developed during the next five years. Developing marketing-oriented activities in comparison with manufacturing-oriented activities among the companies in the industry during the next five years is considerable. On the other hand, it is observable that there were 11 strategic activities (Table 3; rank 13 to 23) with no change expected in the next five years. Offering a lower price than competitors for similar quality products, targeting particular customer groups, improving efficiency of the production facilities, manufacturing products with mass appeal, obtaining necessary capital (Finance) at low cost and providing better customer services than competitors are top six activities that will not be developed during the next five years. Refusal to develop low cost activities among the companies in the industry during the next five years is considerable.

**Competitive strategy orientation at the current and the next five years:** The obtained results from evaluating Porter's competitive strategy demonstrated that there is no significant difference between following the Differentiation and the Cost leadership strategies by the companies currently; however, if the companies follow the Focus strategy the companies show a significant difference in comparison with the two other strategies (Table 4). The rank of importance of the competitive strategy in the order from the highest mean of importance to the lowest mean of importance demonstrated that both Differentiation and Cost leadership strategies together had the highest mean of importance and Focus strategy had the lowest mean of importance. These results showed that the companies in the industry follow Cost leadership and Differentiation strategies in the same way, simultaneously. On the other hand, the results of Duncan's test on the mean scores of each strategy (related tactics) for the next five years revealed that there are significant differences among all three competitive strategies from the companies. These results showed that Differentiation strategy had the highest mean scores of importance followed by Cost leadership strategy and Focus strategy with a significant difference in the next five years. In addition, a comparison between the mean scores of the three competitive strategies in the current and the future demonstrated that all three strategies would be followed highly during the next five years. In other words, the companies in the industry are going to

develop and organize their strategic activities into the significant strategic directions during the next five years.

**Strategic group's orientations:** The result of the factor analysis (Table 5) showed that most variables assessing Cost leadership strategy and one variable assessing Focus Strategy (Focusing on low price products) were loaded in factor 1 which measured the Cost leadership strategy. Most variables assessing Focus strategy together with some variables of Differentiation and Cost leadership strategies were loaded in factor 2 which measured an overall Focus strategy orientation. Three variables related to three competitive strategies were simultaneously loaded in factor 3 which measured unbiased (diverse) orientation. Three major variables assessing Differentiation strategy were loaded in factor 4 which measured Differentiation strategy orientation. The positive sign of all the factor loadings of these variables indicated that stronger execution of these strategic activities would develop stronger strategic orientations. According to the results, there are four types of strategic orientation among the Malaysian wooden furniture industry in the export segment consist of; Cost leadership strategy orientation, mix strategy with Focus strategy orientation (biased mix strategy), absolute mix strategy orientation (unbiased mix strategy) and Differentiation strategy orientation (Table 6).

In the next step, cluster analysis was accomplished on the 58 responding companies based on the factor analysis results. Accordingly, the companies in this study were clustered into four strategic groups with similar strategic activities. Figure 1 presents the diagram of the four strategic groups in the industry and Table 8 presents obvious and similar strategic activities of each group as indicators of their strategic dimensions. Companies in Group 1 (n = 6) were mostly implementing Cost leadership strategy. Furthermore, one variable from the Focus strategy highlights the focus on low cost products. Companies in Group 2 (n = 16) were mostly implementing Focus strategy within five related variables, Differentiation strategy within three variables and Cost leadership strategy within two variables that altogether showed a mix strategy approach with focus orientation. The companies in this group were made up of 28% of the respondent companies. Companies in Group 3 (n = 28) were mostly implementing Differentiation, Cost leadership and Focus strategies simultaneously. Since this group implements three variables that each assessing one of three competitive strategies, it can be considered that the group implemented an unbiased mix strategy. The companies in this group were made up of 48% of the responding companies. Companies in



Group 4 were absolutely implementing Differentiation strategy within 3 related variables.

**Competitive forces across from strategic groups:** The obtained results from evaluating how the respondent companies in the four identified strategic groups perceived the five competitive forces demonstrated the companies in the four strategic groups perceived the five competitive forces as significantly different. Furthermore, the obtained results from Duncan's multiple range test to determine how the companies in each strategic group perceives the five competitive forces demonstrated that the companies who were placed in the Cost leadership strategy group and the Mix strategy group had nearly similar perception of the five competitive forces. According to the results, these companies perceived jointly the intensity of rivalry between existing competitors and the bargaining power of buyers significantly different and higher than other forces. At the same time, the results demonstrated that the companies who were placed in the groups of Mix strategy with Focus orientation and Differentiation strategy group had nearly similar perception of the competitive forces too. These companies perceived the intensity of rivalry between existing competitors significantly different and higher than other forces. The obtained result is presented in Table 7.

**Performance across strategic groups:** Comparison of the average of the firms' performance in different strategic groups demonstrated that the average performance of the Cost leadership group members is significantly lowest among the four identified strategic groups. In addition, there are relatively differences among average performance of three other strategic groups, even so these difference were not significant. Relatively differences among these three groups showed Differentiation group members enjoy of the highest average performance followed by mix-strategy focus oriented group and unbiased mix-strategy group (Table 8).

## **DISCUSSION AND MANAGERIAL IMPLICATION**

**Changes orientation in the strategic activities:** The comparison between the strategic activities subjected to be developed and those which are not going to be developed, demonstrates that the companies in the industry mainly will put some effort to develop strategic activities which have been known as the weakness points of the industry in previous studies (Ratnasingam, 2002a; Bu, 1999). Using new marketing methods, developing a recognizable brand name, controlling channels of

distribution, Investing in new processing equipment, manufacturing customized products for individual consumers and focusing on high price products, respectively are top six strategic activities that the companies decided to develop during the next five years. According to Porter's five forces model in association with the competitive strategy and related tactics, these results imply that the companies in the industry have the proper recognition and rational reflex to the industry's competitive environment.

**Arrangement of competitive strategies at the current and future time:** Even so, the results showed that there was a significant difference between the following three competitive strategies used in the current time but this difference is acquired between the Focus strategy and the two other major strategies which are Cost leadership and Differentiation. However, there was no significant difference between following the Cost leadership strategy and Differentiation strategy by the companies. According to Porter's paradigm, Cost leadership and Differentiation are two major kingpins of the competitive strategy view and Focus strategy is a mixture of the tactics rooted from the two major strategies that is implemented in a particular geographic area or a particular customer group. Accordingly, it can be concluded that the industry does not follow a major competitive strategy in the current time or they are implementing both the Cost leadership and Differentiation strategies simultaneously. In other words, these strategies are not mutually exclusive in the industry currently.

In this sense, there are two different ideas that try to justify the above observable fact. Firstly, Porter (1980) basic paradigm of competitive strategy, proven by some studies (Leitner and Stefan, 2007), believed that successful companies should follow only one of the three competitive strategies directions, specifically Differentiation or Cost leadership. According to this paradigm, companies who do not implement a particular competitive strategy will be placed in stuck in the middle position that is a fragile strategic position and will end up declining the companies' financial performance.

On the other hand, some researchers believe that due to very intense competitions in recent years, companies monitor competitors closely for new ideas and rapidly adopt strategies that appear to be the most efficient (Miles and Snow, 1978; Hall, 1980; Hambrick, 1983; Johns and Butler, 1988; Parnell, 1997; Engelland and Summey, 1999). This group of companies mostly refers to skillful-pioneer companies in order to approve their ideas in competitive strategy in the hope that they will enjoy great growth rate and performance and it was suggested that

lean manufacturing is the best approach to be used to implement all three competitive strategies simultaneously to develop competitive advantages in globally contestable furniture markets (Black and Hunter, 2003).

Based on the comparisons of the two approaches above, the background of the Malaysian wooden furniture industry demonstrates that the industry has been developed based on vital resources such as plentiful raw material and low labor cost, as well as using OEM approach to global market and enjoying governmental supports over the last two decades (Ratnasingam, 2002a), thus the companies in this industry were inattentive to the competitive strategy view and resulted in lacking related skills. Therefore, it seems in the case of the Malaysian wooden furniture industry in the export segment, it is now facing a decline in growth rate and performance and according to some previous studies the industry is in its maturity stage (Ratnasingam, 2002b; Bu, 1999). Porter, (1980) approach is appropriate to explain the industry's current situation. Thus, the industry is mostly placed in the stuck in the middle position that implies the industry does not use a specific strategy rather it wanders among the competitive business level strategies at the current time.

Based on the comparison of the mean scores of the strategic activities related to the three competitive strategies in the next five years and in the current time, it showed that the companies in the industry will put some effort to develop their competitive strategic orientations distinctively in the next five years. Thus, this is in line with the third objective. Furthermore, the companies will follow the three competitive strategies significantly different and at a higher level in the next five years. The result showed the companies in the industry are going to implement Differentiation strategy, followed by Cost leadership strategy and Focus strategy. According to Porter (1980), competitive strategy in association with the five competitive forces, this result indicates that the companies have correct perception towards the competitive forces in the industry environment. Porter, (1980) suggested, in case of being faced with the rise in the intensity of rivalry between existing competitors and in some way the bargaining power of buyers companies should choose a distinct competitive strategy in general and particularly pursue the Differentiation strategy to attain a sustainable advantage and better performance.

**Strategic groups and strategic trends:** The strategic group is an analytical tool designed to aid in structural analysis of an industry. It is an intermediate frame of reference between looking at the industry as a whole and considering each firm separately. Strategic groups often

differ in their product characteristics or marketing approach. These groups could be strong in terms of enjoying distinct competitive strategic orientation specifically Differentiation and somewhat Focus strategy (Porter, 1980; Aaker, 1991; Pearce and Robinson, 1994; Kim and Mauborgne, 1999). Meanwhile, strategic groups could also be fragile because of the lack in distinct competitive strategy orientation (stuck in the middle) and Cost leadership orientation is somewhat commonly not known as a profitable strategy (Porter, 1980; Walters and Knee, 1989; Mintzberg, 1996).

The four identified strategic groups in the Malaysian wooden furniture industry in the export segment revealed that a major part of the industry including the Mix-strategy unbiased group members and Cost leadership group members (in total 58% of the companies in the industry) have been placed in a weak strategic position, 28% of the companies involving Mix-strategy Focus oriented group have been placed in a fairly stronger position and only 14% of the companies involving Differentiation group have been placed in a strong strategic position enjoying sustainable competitive advantages. Consequently, a major of the strategic groups of the industry do not enjoy the strong strategic orientation. This result strongly supports the earlier obtained results in this study concerning that the industry is mostly located in the stuck in the middle position in the current time. This conclusion is compatible with the presented suggestions in the previous studies that have investigated the industry structure based on the migration strategy and the industry life cycle curve (Ratnasingam, 2002b; Bu, 1999).

According to Porter (1980) view, the strategic groups in an industry can be displayed on a map based on the strategic variables that form the map's axes. Figure 2 is an estimated map of strategic groups in the Malaysian wooden furniture industry in the export segment that provide a preliminary perspective to the industry structure based on the major dimensions of strategic activities and resources. Strategic group map is useful to represent the collective market share of the firms in each strategic group with the size of symbols for subsequent analysis.

**Strategic groups and competitive forces:** The obtained results showed among the four strategic groups, Differentiation group received the lowest mean scores of the five competitive forces and the Mix-strategy unbiased group received the highest mean scores of the five competitive forces.

These results are obviously in conformity with the Porter (1980) typology and many other studies on weaknesses and strengths of strategic groups in terms of

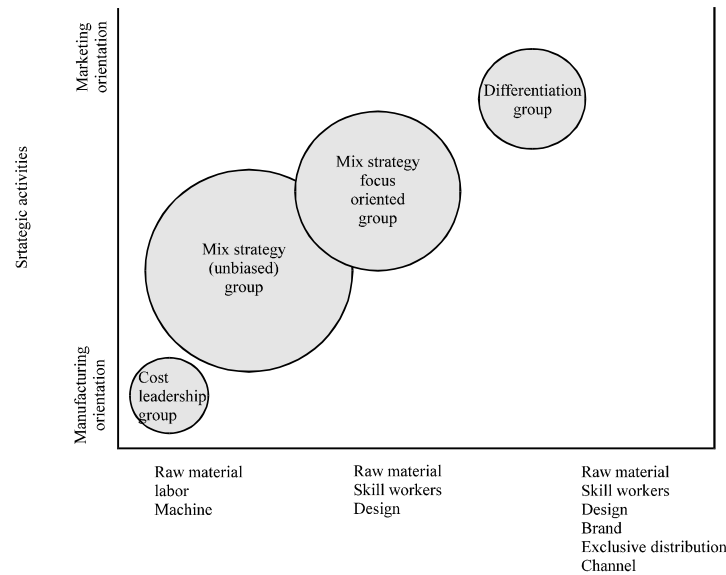


Fig. 2: The estimated map of strategic groups in the Malaysian wooden furniture industry in the export segment

generic strategies orientation. The attraction of Differentiation over Cost leadership as a basis for competitive advantage is its potential for sustainability. Differentiation strategy is not unprotected when facing with competitive forces and changes in the competitive environment and it is more difficult to duplicate by competitors (Kim and Mauborgne, 1999). When competing with rather homogenous products, where price is considered as a marketing instrument, differentiation strategy helps reducing competitive pressure (Aaker, 1991; Pearce and Robinson, 1994). A sturdy position of Differentiation group and somewhat Focus oriented group facing with the five competitive forces are assessable from this view.

On the other hand, as mentioned earlier without a distinct orientation on one of the three strategic orientations, the only alternative for companies in this group may be to depend on price competition. The result is likely to be depressed profitability for all companies in the group. Porter (1980) termed this situation as “stuck in the middle” and concluded that such a strategic position assures low profitability. Walters and Knee (1989), Bush and Sinclair (1991) and Mintzberg’s study (Mintzberg, 1996) approved this view in their studies on various industries. From this view, it can be interpreted that the position of Mix-strategy unbiased group is rather frail.

**Strategic groups and firm performance:** The evaluation of the financial performance among the four strategic groups demonstrated that there were no significant differences in the average performances of the three

strategic groups including Mix-strategy unbiased group, Mix-strategy with Focus orientation group and Differentiation strategy group. A relative difference was observed that showed the Differentiation group had the highest performance average and Mix-strategy unbiased group had the lowest performance average and Mix-strategy with Focus orientation group was placed between them. This can be caused by the interval method of collecting performance data. Nevertheless, there was a significant difference between the performance average the mentioned groups and Cost leadership group. Performance average of Cost leadership group was significantly lower than the other strategic groups.

This result is in oppose to Porter (1980) view that says the companies with a distinct direction in one of three competitive strategies, achieve better performance in comparison with the companies without an strategic direction. Even so, there are many previous studies in agreement with this result that rejected Porter’s view (Miles and Snow, 1978; Hall, 1980; Hambrick, 1983; Johns and Butler, 1988; Parnell, 1997; Engelland and Summey, 1999) but it seems that Porter’s complementary explanation about the essential conditions for the achievement of the Cost leadership strategy is more appropriate in this case. Porter (1980) explains that achieving a Cost leadership position often requires a high relative market share or other advantages, such as favorable access to raw materials. He also mentioned that inflation in costs that narrow the firm’s ability to maintain its margin of profit and facing with powerful cost leadership that enjoys a major market share, as two key

factors that possibly place a Cost leadership follower in a weak strategic position with lower performance compared to the industry average performance. In this sense, the cumulative cost of raw material and labor and facing with China as global cost leadership of wooden furniture industry with highest market share in global market (Norini, 2003) could be the logical reasons for low performance of Cost leadership group in comparison with other strategic groups in the Malaysian wooden furniture industry.

### CONCLUSION

The findings from the evaluation of the strategic activities and so competitive strategic direction, identification and investigation of the strategic groups' characteristic and the five competitive forces formation among the strategic groups among the Malaysian wooden furniture industry specifically in the export segment harmoniously approved the presented hypothesis in this research. In other words, findings of this study revealed that the main body of the industry contains two major strategic groups (76% of the companies) which do not pursue one of two basic competitive strategies namely Differentiation and Cost leading ship. This situation put the industry in the fragile position facing both differentiation leader ships like Italy and Cost leaderships like China and will end up the industry's competitiveness decline in long term.

Nevertheless, the findings from investigation of strategic orientation of the major strategic groups during the next five years couple with the five competitive forces formation in these groups, demonstrated that the companies in the industry enjoy of proper intelligent on competitive forces and decide to develop their strategic activities in appropriate with key competitive forces in the competitive environment.

A remarkable finding in the field of strategic groups, contrary to Porter's view, demonstrated that the Cost leadership group as a distinct competitive strategy follower significantly suffers from lower profitability (as index of performance) compared to major strategic groups which do not pursue a distinctive competitive strategy. This result rejects Porter's view higher profitability of the firms that pursue only one strategic direction compared to the firms that pursue all competitive strategies simultaneously.

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