

Does the implementation of a combination competitive strategy yield incremental performance benefits? A new perspective from a transition economy in Sub-Saharan Africa

By: [Moses Acquaaah](#) and Masoud Yasai-Ardekani

Acquaaah, M. & Yasai-Ardekani, M. (2008). "Does the Implementation of a Combination Competitive Strategy Yield Incremental Performance Benefits? A New Perspective from a Transition Economy in Sub-Saharan Africa." *Journal of Business Research*, 61: 346-354. <https://doi.org/10.1016/j.jbusres.2007.06.021>



© 2007 Elsevier Inc. This manuscript version is made available under the CC-BY-NC-ND 4.0 license <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

Abstract:

This study examines the performance implications of implementing generic competitive strategies, and whether the implementation of a combination competitive strategy yields an incremental performance benefit over a single generic competitive strategy using data from Ghana, a Sub-Saharan African economy implementing economic liberalization policies. Two types of singular generic competitive strategies are analyzed: cost-leadership and differentiation. Our findings from the overall sample provide support for the viability and profitability of implementing coherent generic competitive strategies — cost-leadership, differentiation, and the combination of the singular strategies. The results further indicate that firms implementing a combination strategy tend to experience substantial incremental performance benefits over those implementing only the cost-leadership strategy. However, the incremental performance benefits to firms implementing a combination strategy do not significantly differ from the performance of firms implementing only the differentiation strategy. Furthermore, firms that implement a coherent competitive strategy (combination, cost-leadership, or differentiation) tend to gain considerable incremental performance benefits over firms that are stuck-in-the-middle. Implications are discussed.

Keywords: incremental performance benefit | competitive strategies | Sub-Saharan Africa transition economy | Ghana

Article:

1. Introduction

The impact of Porter, 1980, Porter, 1985) generic competitive strategies of overall cost-leadership, differentiation and focus on strategic management research cannot be overemphasized. According to Porter (1985), each of these three generic competitive strategies is a completely different way of creating a sustainable competitive advantage. A firm must, therefore, make a choice between cost-leadership and differentiation strategies or it will become stuck-in-the-middle without a coherent strategy. Several researchers have found empirical support for Porter's assertion that overall cost-leadership and differentiation cannot be

simultaneously pursued successfully (Dess and Davis, 1984, Hambrick, 1983, Robinson and Pearce, 1988). Others have, however, asserted that cost-leadership and differentiation strategies are not mutually exclusive and that they can be pursued simultaneously (Hill, 1988, Jones and Butler, 1988, Murray, 1988, Wright, 1987). Although, few empirical studies have specifically investigated the impact of simultaneous pursuit of generic competitive strategies (i.e., combination strategy) on firm performance (Kim et al., 2004, Miller and Dess, 1993, Spanos et al., 2004, Wright et al., 1991), none has directly tested its incremental performance benefits over singular strategies.

The purpose of this paper is to extend this line of inquiry by (1) determining the performance implications of implementing a coherent competitive strategy (cost-leadership, differentiation and a combination of cost-leadership and differentiation), and (2) examining the incremental performance benefits of implementing a combination competitive strategy over a single generic strategy using data from a transition economy in Sub-Saharan Africa-Ghana. Transition economies in Sub-Saharan Africa have historically insulated domestic firms from global and sometimes domestic competition. However, these countries are currently transforming their economies from state-controlled to free market capitalist systems. Governments in most of these Sub-Saharan African transition economies have been implementing economic transformation policies for more than two decades – have dismantled protectionist barriers, adopted free trade policies, created market-friendly institutions and integrated these economies into the global market economy – thus intensifying domestic market competition. However, the impact of the economic transformation policies have been slow to take hold, therefore, these transition economies are still characterized by a high level of market imperfections and generally suffer from “institutional voids” — the absence of market-supporting institutions, specialized intermediaries, contract-enforcing mechanisms, and efficient transportation and communications networks (Khanna and Palepu, 1997, Khanna and Palepu, 2006). As a result of these institutional voids, firms lack key raw materials, easy access to capital at a reasonable cost, and managerial and technical talents. In addition, income levels are typically low while the pool of unskilled labor is relatively high. While these conditions have led to increased business transaction costs and business risks, the economic liberalization policies have increased competition by exposing consumers to wide-ranging product choices, thus requiring different strategic responses by firms in the domestic economies. The need to focus on cost reduction and efficiency improvement, in addition to improving quality is therefore a strategic priority to firms in transition economies.

Although, Ghana is a relatively small transition economy it has received considerable attention in the popular business press with regards to its success in implementing economic transformation policies in Sub-Saharan Africa (Leechor, 1994). The content of the economic transformation policies in Ghana include: privatization of state owned enterprises; monetary and banking reforms to improve access to capital; removal of import controls and foreign exchange restrictions; removal of price controls and local production subsidies; and the development of private entrepreneurial organizations. The economic liberalization policies have increased competition in the business environment. Domestic firms that were formally insulated from competition emanating from the global economy now face significant changes in the environment in which they do business. Thus it is important for domestic firms to develop viable competitive strategies in their quest to become competitive and successful in the liberalized economy (Anand et al., 2006). Responding to the increased competition in the domestic business

environment, firms in Ghana have become more competitor- and customer-focused by developing and implementing the appropriate business strategies that would enable them to improve their competitiveness and performance. We thus answer the following questions: What should firms in this transition economy do strategically to become competitive and profitable? Should firms focus on implementing a singular competitive strategy (e.g., cost-leadership or differentiation) in order to become competitive and profitable? Or should firms consider implementing a strategy that simultaneously focuses on cost-leadership and differentiation (i.e., combination competitive strategy)? Are there any incremental performance benefits to implementing a combination competitive strategy over singular strategies?

We posit that the implementation of a combination competitive strategy is not only feasible, but will also generate superior incremental performance over the implementation of single competitive strategies. The implementation of a combination competitive strategy results in multiple sources of competitive advantage (e.g., economies of scale and brand/customer loyalty) as compared to advantages gained through pursuit of single competitive strategies. Moreover, the pursuit of a combination competitive strategy, and each of the single competitive strategies will generate superior incremental performance over the inability to successfully pursue any of the singular competitive strategies (i.e., stuck-in-the-middle). Thus, in this paper, we focus on the additional performance benefits that accrue to firms as a result of implementing a combination competitive strategy. This approach contrasts sharply with most prior studies (e.g., Kim et al., 2004, Miller and Dess, 1993, Spanos et al., 2004, Wright et al., 1991) that have examined the impact of the pursuit of a combination strategy on firm performance without explicitly separating out the incremental benefits of the combination competitive strategy over each of the singular competitive strategies.

2. Theory and hypotheses

2.1. Theoretical background

Porter, 1980, Porter, 1985) developed the concept of generic competitive strategies – overall cost-leadership, differentiation, and focus – to represent different strategic orientations a firm should pursue in order to realize its goals. Porter claimed that firms that pursue any of these strategic orientations would acquire a competitive advantage that would enable them to outperform competitors in their industry. On the other hand, firms that fail to develop their strategic orientation in at least one of the three directions would be “stuck-in-the-middle” and experience low profitability (Porter, 1980, p. 41). Furthermore, for a firm to earn superior profits and outperform its competitors, it must make a clear choice between cost-leadership and differentiation strategies in order to avoid “the inherent contradictions of different strategies” (Porter, 1996, p. 67). Porter (1985), however, argued that a firm can only pursue a combination strategy and outperform its rivals under three conditions: when competitors are “stuck-in-the-middle”; when the firm enjoys overwhelming economies of scale; and when the firm holds exclusive rights to a major technological innovation.

From a theoretical perspective, several studies have challenged Porter's thesis and advanced support for the efficacy of pursuing a combination strategy. Karnani, 1984, Hill, 1988, Jones and Butler, 1988, Murray, 1988 have shown that it is feasible to combine generic competitive

strategies under certain conditions. Empirical studies such as Hambrick, 1983, Dess and Davis, 1984, Robinson and Pearce, 1988, Campbell-Hunt, 2000 have confirmed Porter's thesis. Conversely, support for the viability of a combination strategy has also been documented by several studies (Bowman and Ambrosini, 1997, Kim et al., 2004, Miller and Dess, 1993, Spanos et al., 2004, Wright et al., 1990, Wright et al., 1991). Table 1 presents a brief summary of some of the empirical studies that have examined the combination strategy-performance relationship using Porter's typology. Studies in Table 1 indicate that the differences in the findings are due to the operationalization of the combination strategy construct. Studies that failed to distinguish between combination strategy (high emphasis on both cost-leadership and differentiation) and “stuck-in-the-middle” (low emphasis on both cost-leadership and differentiation) and operationalized the combination strategy as “stuck-in-the-middle” found it to be unprofitable (e.g., Dess and Davis, 1984, Kim and Lim, 1988, Robinson and Pearce, 1988). However, those studies that made this distinction have reported positive relationships between combination strategies and firm performance (Kim et al., 2004, Spanos et al., 2004).

Table 1. Previous empirical studies on combination strategies-performance relationship

Previous studies	Data and sample	Operationalization of competitive strategy	Operationalization of performance	Statistical methodology	Findings
Hambrick (1983)	PIMS data from 164 firms in mature industrial-product industries in the US.	Archival data. Cost-leadership (cost efficiency and asset parsimony); differentiation; focus (scale/scope).	Objective measure of Return on Investment (ROI)	Cluster analysis	Firms that pursued at least one of the pure strategies of cost efficiency (low-cost) and differentiation performed better than firms that pursued combination strategies in two capital goods industries.
Dess and Davis (1984)	78 non-diversified manufacturing firms in the paints and allied products industry in the US.	Survey data. Cost-leadership; differentiation; and focus; stuck-in-the-middle (combination).	Objective measures of Sales Growth and Return on Assets (ROA)	Cluster analysis	Firms that pursued one of the pure strategies of low-cost, differentiation, or focus performed better than those who pursued a combination strategy (which they called “stuck-in-the-middle”) among nondiversified manufacturing firms.
Kim and Lim (1988)	54 firms in electronic industry in Korea.	Survey data. Cost-leadership, product differentiation, marketing differentiation, focus, and stuck-in-the-middle (combination).	Objective measures of ROA, Return on Equity (ROE) and Sales Growth Rate	Cluster analysis, multiple discriminant analysis, and ANOVA	Firms that pursued one of the pure strategies of low-cost or differentiation performed better than firms that pursued combination strategies (stuck-in-the-middle).
Robinson and Pearce (1988)	97 firms in various manufacturing industries in the US.	Survey data. Efficiency; service; product innovation and development; brand/channel influence; no clear strategic orientation (combination).	Subjective measures of ROA, Return on Sales (ROS), Sales Growth, and overall firm performance/success	Analysis of variance (ANOVA) and multivariate analysis of	Found that firms pursuing either efficiency (low-cost) or pure differentiation (service, product innovation and development, brand/channel influence)

Previous studies	Data and sample	Operationalization of competitive strategy	Operationalization of performance	Statistical methodology	Findings
Wright et al. (1990) ^a	67 firms in the apparel industry in the US.	Survey data. Low cost, differentiation, and focus, multiple (combination of three singular strategies).	Objective measure of ROI	Cluster analysis variance (MANOVA)	performed better than those without a clear strategic orientation (combination strategy). Firms that pursued a combination strategy performed better than firms that pursued pure low-cost or differentiation strategies.
Wright et al. (1991) ^a	56 firms in the screw machine products industry in the US.	Survey and archival data. Low-cost, differentiation, combination of low-cost and differentiation.	Objective measures of ROI and Growth in Relative Market Share	Cluster analysis	Firms that combined low-cost and differentiation-based strategies achieved superior performance compared to firms that pursued pure low-cost or differentiation strategies.
Miller and Dess (1993) ^a	PIMS data from 715 firms in various manufacturing industries in the US.	Archival data: differentiation and cost (broad), differentiation and cost (narrow), differentiation (broad), differentiation (narrow), cost (broad), cost (narrow), stuck-in-the-middle.	Objective measures of ROI, Cash Flow on Investment, Sales Growth, Market Share, and ROI Instability	ANOVA	Firms that pursued a combination of low-cost and differentiation strategies performed better than firms that pursued the pure low-cost or differentiation strategies.
Bowman and Ambrosini (1997) ^a	426 managers in 32 strategic business units from various industries in UK.	Survey data. Cost efficiency, differentiation, hybrids (combination), impoverished (no strategic orientation).	Subjective measures of Firm Profitability and Sales Growth	<i>T</i> -test	Performance of firms where managers displayed consensus on the simultaneous pursuit of differentiation and low-cost strategies were higher than those with consensus on only a differentiation or low-cost strategy.
Campbell-Hunt (2000)	17 studies from 1983-1995. Obtained 80 clusters of strategy archetypes.	Data from published research. Cost, differentiation, mixed emphasis (combination), and no emphasis.	Financial return and Growth	Meta-analysis, logistic regression	In 10 of the 17 studies that investigated performance issues, the study found that neither single strategies (cost-leadership or differentiation) nor combination strategies show significantly higher frequency of above performance as compared with no emphasis.
Kim et al. (2004) ^a	75 business-to-customer (B2C) firms obtained from a Korean	Survey data. Cost-leadership, focused differentiation, integrated (combination of cost-leadership and	Subjective measures of Revenue, Growth Rate, Growth Potential, Profit, and	Cluster analysis	Firms pursuing a combination strategy of cost-leadership and differentiation performed better than those

Previous studies	Data and sample	Operationalization of competitive strategy	Operationalization of performance	Statistical methodology	Findings
	online shopping mall.	differentiation) strategy, stuck-in-the-middle, and online focused.	Overall Firm Performance		pursuing the pure strategies of cost-leadership or differentiation.
Spanos et al. (2004) ^a	1921 manufacturing firms from Greece.	Archival data. Low cost (value-added), Marketing differentiation (Advertising intensity) and Technology differentiation (technology intensity), Two strategy combinations, Three strategy combinations, stuck-in-the-middle.	Objective measure of Price-Cost Margin (PCM)	Regression analysis	Most combination strategies were positively related to performance. However, the pure strategies of low-cost, marketing differentiation, and technology differentiation were either negatively related to performance or not significantly related to performance.

^a Although these studies have reported higher performance for firms pursuing a combination strategy as compared to those that pursue the cost-leadership or differentiation strategies, they did not directly test for the incremental performance differences between the combination and singular strategies.

2.2. Hypotheses

2.2.1. Cost-leadership strategy

A firm that pursues this strategy achieves a low-cost position by emphasizing “aggressive construction of efficient-scale facilities, vigorous pursuit of cost reductions from experience, tight cost and overhead control, avoidance of marginal customer accounts, and cost minimization in areas like R&D, service, sales force, advertising, etc.” (Porter, 1980, p. 35). The maintenance of a strong competitive position for organizations pursuing cost-leadership strategies places a premium on efficiency of operations that enables them to sustain their profit margins for a considerable period of time. The cost leadership strategy may be particularly appealing to firms in transition economies such as Ghana because not only the dismantling of trade barriers have lead to flood of imported products from low-wage countries such as China, but also because most consumers are low-income earners and thus highly price sensitive. Thus in transition economies, firms that emphasize the cost-leadership strategy will be expected to experience an increase in performance.

2.2.2. Differentiation strategy

A firm that pursues a differentiation strategy seeks to create a perception in the minds of customers that their products or services possess superior characteristics that are unique from those of its competitors in terms of image and reputation, reliability, design features and quality (Dean and Evans, 1994, Sashi and Stern, 1995). A firm creates these perceptions by incorporating real qualitative differences in its products and services, engaging in advertising programs, marketing techniques, and charging premium prices (Miller, 1986). Differentiation firms are able to achieve a competitive advantage over their rivals because of the perceived

uniqueness of their products and services. Pursuit of a differentiation strategy helps the firm to avoid high price competition because it creates brand and customer loyalty (Porter, 1980). The differentiation strategy may also be viable in transition economies like Ghana because due to economic liberalization policies, customers have been exposed to imported products with greater variety and higher quality. Thus emphasizing a differentiation strategy could attract more customers and lead to an increase in firm performance.

2.2.3. Combination strategy

A combination strategy has been shown to be viable and profitable (Kim et al., 2004, Miller and Dess, 1993, Wright et al., 1991). Since cost-based and differentiation-based advantages are difficult to sustain, firms that pursue a combination strategy may achieve higher performance than those firms that pursue a singular strategy. Pursuit of a differentiation strategy for low-cost firms will help minimize their vulnerability due to reliance on cost-based advantages only (Yasai-Ardekani and Nystrom, 1996). Furthermore, firms that pursue a differentiation strategy may also be able to achieve a low-cost position by emphasizing efficiency in their value-creating activities, thereby further strengthening their competitive position vis-à-vis their rivals. The success of Japanese companies such as Toyota, Canon, and Honda has been attributed to the simultaneous pursuit of cost-leadership and differentiation strategies (Ishikura, 1983).

A combination competitive strategy involving high levels of emphasis on both cost-leadership and differentiation strategies simultaneously should be distinguished from “stuck-in-the-middle” strategy where a firm fails to successfully pursue both cost-leadership and differentiation strategies. Most prior studies have failed to make this distinction leading to contradictory findings on the impact of combination strategy on performance. In transition economies, competition from non-domestic firms, imports and the exposure of domestic consumers to a wide variety of product choices as a result of economic liberalization demands high emphasis on both efficiency and differentiating factors such as quality and service by firms to be competitive and successful. Thus, we posit that firms emphasizing the combination strategy will be expected to experience an increase in performance. But, firms that pursue the combination strategy are able to achieve a significantly higher level of performance than firms that pursue a singular strategy. Moreover, firms that pursue either the singular strategies or the combination strategy will experience a significant incremental performance benefit over firms that are “stuck-in-the-middle”. We therefore present the following hypotheses:

Hypothesis 1. There will be a positive relationship between the implementation of a coherent generic competitive strategy (cost-leadership, differentiation, and combination) and firm performance.

Hypothesis 2A. Firms that implement a combination strategy will outperform firms that implement a pure cost-leadership strategy.

Hypothesis 2B. Firms that implement a combination strategy will outperform firms that implement a pure differentiation strategy.

Hypothesis 3A. Firms that implement the pure cost-leadership strategy will outperform firms that are stuck-in-the-middle.

Hypothesis 3B. Firms that implement the pure differentiation strategy will outperform firms that are stuck-in-the-middle.

Hypothesis 4. Firms that implement a combination strategy will outperform firms that are stuck-in-the-middle.

3. Methods

3.1. Sample and data

The sample consisted of the 200 large and medium-sized companies selected from the *Ghana Business Directory* (2001) and the membership directory of the Association of Ghana Industries. Data were collected from two sets of senior executives in each company — data on the independent variables were obtained from CEO's/MD's and their deputies, while data on firm performance were collected from the head of accounting/finance function. After the initial contact with each company, the first author visited each company, presented the survey instrument to the CEO/MD and agreed on a date to collect the completed surveys. After several visits to the companies, we received responses from 115 companies. However, only 106 of the survey instruments had complete data on all questions yielding a usable response rate of 53%.

3.2. Measurement

3.2.1. Firm performance

Objective performance data was not publicly available for almost 90% of the sample. Therefore, subjective performance data were gathered from the respondents. This practice is common in situations where objective data is either not available or difficult to obtain (e.g., Bae and Lawler, 2000, Bowman and Ambrosini, 1997, Wall et al., 2004). Firm performance is a multidimensional construct. Therefore, a composite measure of firm performance was used. Respondents were asked to indicate the performance of their company relative to their competitors over the past three years in terms of return on sales and return on assets using scales ranging from (1) 'much worse' to (7) 'much better'. The two performance measures were highly correlated ($r = 0.80$). The composite measure of performance uses the average of the scores on the two measures. The comparison of each firm's performance relative to its competitors provides a form of control for differences in performance that may be due to the type of industry or business sector (Venkatraman and Ramanujam, 1986). Furthermore, the three-year period minimizes the influence of short-term variations on the reported firm performance.

3.2.2. Competitive strategy

We measured competitive strategy using the sixteen competitive methods that have been used extensively to operationalize Porter's (1980) generic competitive strategies (e.g., Dess and Davis, 1984, Kotha et al., 1995, Kotha and Vadlamani, 1995, Miller and Dess, 1993). Respondents were

asked to indicate the extent to which their organizations have emphasized and implemented each competitive method over the past three years. Each item uses a scale ranging from (1) much less to (7) much more. To ensure that the items measuring competitive strategy represented the underlying constructs, we conducted a factor analysis. Table 2 shows the results of the factor analysis.

Table 2. Factor analysis of competitive strategy items^a

Scale and items	Factor 1	Factor 2
Differentiation strategy		
Developing new products or services	0.802	0.151
Upgrading or refining existing products	0.662	0.386
Emphasizing products or services for high priced market segments	0.550	0.370
Improving existing customer service	0.648	0.246
Innovation in marketing products and services	0.689	0.262
Advertising and promotion of products and services	0.838	0.158
Building and improving brand or company identification	0.791	0.245
Offering specialty products ^b	0.636	0.453
Effective control of distribution channels ^b	0.522	0.433
Cost-leadership Strategy		
Offering a broad range of products or services	0.107	0.677
Operating efficiency	0.241	0.798
Offering competitive prices for products and services	0.207	0.558
Forecasting market growth in sales	0.179	0.820
Emphasizing control of operating and overhead costs	0.271	0.648
Innovation in production process or service offerings	0.201	0.794
Emphasizing high quality standards or high quality service ^b	0.475	0.548
Eigenvalue	5.281	3.385
Percentage of variance explained	33.005	21.154
Cumulative percentage of variance explained	33.005	54.159
Reliability (Cronbach's alpha coefficient)	0.84	0.83

^aMethod used was principal component analysis with varimax rotation. Factor loadings greater than an absolute value of 0.40 are shown in bold font.

^bAll items that loaded on more than one factor were excluded from operationalizing the competitive strategy variables.

The composite measure of *differentiation strategy* averages the scores on the seven items with high loadings on only Factor 1. The composite measure of *cost-leadership strategy* averages the scores on the six items with high loadings on only Factor 2. The three items with high loadings on both factors were not used. Details of items and the reliability coefficients for the two composite measures are shown in Table 2.

The *combination strategy* was operationalized as a dummy variable coded as 1 for firms with composite scores on *both* the cost-leadership and differentiation strategies *greater than* the sample mean of the respective competitive strategies and 0 otherwise. The *stuck-in-the-middle strategy* was also operationalized as a dummy variable coded as 1 for firms with composite scores on *both* cost-leadership and differentiation strategies *equal to or less than* the sample mean of the respective competitive strategies, and 0 otherwise.

3.2.3. Control variables

We controlled for a number of factors that might influence a firm's performance. *Firm size* was measured as the logarithm of the number of employees. *Firm ownership* was measured as a dummy variable, coded 1 for wholly owned local companies and 0 for joint venture companies. *Business sector* was measured using a dummy variable, coded 1 for manufacturing firms and 0 for service firms. *Market competitive intensity* was measured using a previously validated instrument that has been used in an economic environment that has implemented economic reforms (Mia and Clarke, 1999). Respondents were asked to indicate on scales ranging from (1) 'very little' to (7) 'very extensive' the extent to which each of the following activities have taken place in their industry over the past three years: increase in the number of major competitors; use of package deals for customers; frequency of new products or service introductions; rate of change in price manipulations; increase in the number of companies that have access to the same marketing channels; and the frequency of changes in government regulations affecting the industry. The composite measure of *Market competitive intensity* averages the scores on these seven scales.

3.3. Method of analysis

We used analysis of variance to test for performance differences due to firms' strategic orientations. Multiple regression analysis is used to test the effects of different strategic orientations on firm performance (hypothesis 1) and to test the incremental benefits of pursuing different strategies (hypotheses 2A,B-4).

4. Results

Table 3 presents the descriptive statistics and correlations among the variables. Table 4 shows the results of analysis of variance. As may be seen, the results indicate that there are significant differences in the performance of firms that pursue different strategic types. Table 5 shows the results of regression of firm performance on control variables and the strategy variables of cost-leadership, differentiation, combination, and stuck-in-the-middle. Model 2 shows that the cost-leadership strategy, differentiation strategy, and the combination strategy positively influence firm performance. But there is no relationship between the stuck-in-the-middle strategy and performance. Thus the implementation of a coherent generic competitive strategy (cost-leadership, differentiation, and combination) has the potential to improve firm performance, providing support for hypothesis 1.

Table 3. Descriptive statistics and correlations ($N = 106$)

Variables	Mean	Median	S.D.	1	2	3	4	5	6	7	8	9
1. Firm performance	4.81	5.00	1.13	0.91								
2. Firm age	22.43	17.00	15.77	0.09								
3. Firm size (log number of employees)	1.91	1.84	0.53	0.25**	0.48***							
4. Firm ownership	0.28	0.00	0.45	0.17	0.39***	0.43***						
5. Industry (manufacturing vs. service)	0.83	1.00	0.38	-0.19	-0.12	-0.24**	0.06					
6. Market competitive intensity	4.79	5.00	1.25	0.37***	-0.01	-0.01	0.09	-0.09	0.73			
7. Cost-leadership strategy	4.88	5.14	1.16	0.30**	0.08	0.23*	0.14	-0.17	0.09	0.83		
8. Differentiation strategy	4.69	4.88	1.19	0.40***	-0.01	0.11	0.01	-0.06	0.18	0.01	0.84	
9. Combination strategy ^a	0.34	0.00	0.48	0.29**	0.08	0.21*	0.08	-0.26**	0.20*	0.39**	0.51**	
10. Stuck-in-the-middle strategy ^b	0.23	0.00	0.42	-0.39***	-0.09	-0.16	-0.09	0.07	-0.21*	-0.32***	-0.54**	-0.39***

Significance levels: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.

Reliability coefficients are shown in bold-face.

^a Dummy variable coded 1 if both the cost-leadership and differentiation strategies for a firm are *greater than* the average for the respective strategies and 0 otherwise.

^b Dummy variable coded 1 if both cost-leadership and differentiation strategies for a firm are *less than or equal to* the average for the respective strategies and 0 otherwise.

Table 4. Analysis of variance results

Panel A: differences in performance among strategy types					
Source of variation	Degrees of freedom	Sum of squares	Mean squares	F-statistic	P-value
Competitive strategy	3	24.34	8.11	7.57	0.0001
Error	102	109.30	1.07		
Total	105	133.64			
Panel B: number, mean and standard deviation of performance of strategy types					
Strategy type	Number	Mean	Standard deviation		
Stuck-in-the middle	24	3.983	1.076		
Cost-leadership	20	4.820	1.253		
Differentiation	26	4.908	1.004		
Combination	36	5.272	0.888		

Table 5. Impact of competitive strategy on performance^a

Variables	Model 1		Model 2	
	β (S.E.)	VIF	β (S.E.)	VIF
Market competitive intensity	0.35 (0.09)***	1.0	0.29 (0.08)***	1.1
Firm age	- 0.05 (0.10)	1.4	- 0.01 (0.09)	1.4
Firm ownership	0.07 (0.10)	1.4	0.07 (0.09)	1.6
Firm size	0.21 (0.10)*	1.5	0.12 (0.10)	1.6
Industry ^b	- 0.11 (0.09)	1.1	- 0.12 (0.09)	1.2
Cost-leadership strategy			0.34 (0.12)**	2.2
Differentiation strategy			0.41 (0.12)***	2.3
Combination strategy ^c			0.26 (0.13)*	2.7
Stuck-in-the-Middle ^d			- 0.08 (0.10)	1.7
Adjusted R^2	0.17		0.33	
F	5.36***		6.67***	
Sample size (N)	106		106	

Significance levels; *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.

^a The reported coefficients are standardized coefficients. Standard errors are in parentheses.

^b Dummy variable coded as 1 for manufacturing firms and 0 for service firms.

^c Dummy variable coded as 1 if both the cost-leadership and differentiation strategies for a firm are *greater than* the average for the respective strategies; 0 otherwise.

^d Dummy variable coded as 1 if both cost-leadership and differentiation strategies for a firm are *less than or equal to* the average for the respective strategies; 0 otherwise.

Table 6. Incremental performance difference between different competitive strategic orientations^a

Variables	Model 3	Model 4	Model 5	Model 6	Model 7
Market competitive intensity	0.31 (0.14)*	0.33 (0.13)*	0.32 (0.12)**	0.29 (0.13)*	0.28 (0.12)*
Firm age	- 0.10 (0.17)	- 0.06 (0.14)	- 0.21 (0.14)	- 0.03 (0.14)	- 0.03 (0.12)
Firm ownership	0.04 (0.15)	- 0.02 (0.13)	0.30 (0.15)*	0.11 (0.15)	- 0.04 (0.12)
Firm size	0.25 (0.12)*	0.29 (0.14)*	0.06 (0.17)	0.11 (0.14)	0.13 (0.14)
Industry ^b	- 0.09 (0.14)	0.20 (0.14)	0.50 (0.12)***	- 0.10 (0.13)	- 0.05 (0.12)
Combination vs. cost ^c	0.28 (0.13)*				
Combination vs. differentiation ^d		0.14 (0.13)			
Cost vs. stuck-in-the-middle ^e			0.27 (0.12)*		
Differentiation vs. stuck-in-the-middle ^f				0.36 (0.13)**	
Combination vs. stuck-in-the-middle ^g					0.42 (0.12)***
Adjusted R^2	0.20	0.18	0.41	0.19	0.32
F	2.97**	2.59*	6.05***	2.88*	5.67***
Sample size (N)	56	62	44	50	60

Significance levels; *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.

^a The reported coefficients are standardized coefficients. Standard errors are in parentheses.

^b Dummy variable coded as: manufacturing firms = 1; service firms = 0.

^c Dummy variables coded as: combination strategy = 1; cost-leadership = 0.

^d Dummy variable coded as: combination strategy = 1, differentiation = 0.

^e Dummy variable coded as: cost leadership strategy = 1, stuck-in-the-middle = 0.

^f Dummy variable coded as: differentiation strategy = 1, stuck-in-the-middle = 0.

^g Dummy variable coded as: combination strategy = 1, stuck-in-the-middle = 0.

For test of incremental performance benefits (hypotheses 2A,B-4) we first classified the firms by strategy type as follows: firms with composite scores greater than the sample mean on the cost-

leadership strategy only were classified as pursuing the cost-leadership strategy; those firms with composite scores greater than the sample mean on the differentiation strategy only were classified as pursuing the differentiation strategy; those firms with composite scores greater than the sample means on both the cost-leadership and the differentiation strategy were classified as pursuing the combination strategy; and those firms with composite scores equal to or less than the sample means on both the cost-leadership and the differentiation strategy were classified as stuck-in-the-middle. This classification is then used to create five dummy variables. Table 6 shows the regression models used to test the incremental performance hypotheses. Each model shows the regression of firm performance on control variables and a dummy variable. In model 3, for instance, the dummy variable is coded as 1 for firms that pursue the combination strategy and 0 for firms that pursue only the cost-leadership strategy. In these models, the coefficient of the dummy variable indicates if there are significant differences in performance of the two groups. For model 3, the coefficient of the dummy variable is positive and statistically significant indicating that firms that pursue a combination strategy outperform those firms that implement the cost-leadership strategy. Thus hypothesis 2A is supported.

In model 4, the dummy variable is coded as 1 for firms that pursue the combination strategy and 0 for firms that only pursue the differentiation strategy. Hypothesis 2B posited that firms that implement the combination strategy will outperform firms that implement the differentiation strategy. Although the coefficient of the dummy variable in Model 4 is positive, it is not statistically significant. This result indicates that the performance of firms that pursue the combination strategy does not significantly differ from the performance of those firms that pursue a differentiation strategy. Hypothesis 2B is therefore not supported. Models 5–7 test for the performance differences of firms that pursue coherent strategies and those that are stuck-in-the-middle. In model 5, the dummy variable is coded as 1 for firms that pursue cost-leadership, and 0 for firms that are stuck-in-the middle. Similar dummy coding is used for models 6 and 7 to contrast pursuit of differentiation and combination strategies versus stuck-in-the-middle. As may be seen the coefficient of the dummy variables in models 5, 6, and 7 are positive and statistically significant. These results indicate that firms that pursue cost-leadership, differentiation, or combination strategies outperform those firms that are stuck-in-the-middle. Hypotheses 3A,B and 4 are therefore supported. Thus, firms that implement a clearly defined and coherent strategy significantly improve their performance over firms that are stuck-in-the-middle.

5. Discussion

This study extends previous research and sheds more light on the performance implications of implementing a coherent generic competitive strategy and the incremental performance benefit of implementing a combination competitive strategy over singular strategies. Whereas extant research has focused on examining whether the implementation of combination strategies positively affect firm performance, our study goes a step further by separating out the incremental performance effects of a combination competitive strategy over each of the pure strategies of cost-leadership and differentiation. We also examined the incremental performance benefits of the combination, cost-leadership, and differentiation strategies over the ‘stuck-in-the-middle’ strategy. Consistent with extant research, the results from our overall sample provides support for the viability and profitability of pursuing the cost-leadership, differentiation and combination strategies (e.g., Kim et al., 2004, Miller and Dess, 1993, Spanos et al., 2004).

However, our analyses also reveal interesting results with regard to the incremental benefits obtained from pursuing a combination strategy over a singular strategy.

Our central thesis was that there will be a significant incremental performance benefit to firms that pursue a combination strategy over firms that pursue singular strategies. The results show that there is a significant performance benefit to firms that pursue a combination strategy over those that only pursue the cost-leadership strategy. This result implies that firms focusing only on a cost-leadership strategy in a transition economy will benefit significantly by combining it with a differentiation strategy. Implementing a combination strategy is more viable than cost-leadership strategy alone because in transition economies customers are not only price sensitive but they have also become progressively conscious of quality, image, and service. The results however show that firms that pursue a differentiation strategy may not benefit by combining it with a cost-leadership strategy. Although firms that pursue a differentiation strategy in transition economies would also need to focus on cost reduction in order to be competitive with domestic and foreign firms, a dual focus on differentiation and cost-leadership does not seem to confer significant incremental benefits over a focus on differentiation only. The results also indicate that firms pursuing the cost-leadership, differentiation, or the combination strategy experience significant incremental performance benefit over firms that are “stuck-in-the-middle”. These results clearly suggest that implementing a coherent strategy is essential for achieving superior firm performance. It should be noted that market competition is positive and significant in all the models suggesting that the economic liberalization policies allow firms operating in highly competitive environments to improve their performance.

6. Limitations and future study

This study, however, is not without its own limitations. First, we used subjective measures of performance instead of objective measures. Objective performance measures would have been preferable but as mentioned in the methods section, many of the firms were privately owned so objective performance data was difficult to obtain. Even if such performance data were provided by the firms, they may suffer from inaccuracies, as such data are often not audited in privately held organizations. Moreover, as presented earlier, Wall et al. (2004) have demonstrated the validity of subjective performance measures as substitutes for objective performance measures. Second, the effectiveness of competitive strategies may vary depending on the stage of industry life cycle. Therefore, future researchers should take into account the effects of industry life-cycle stage when examining the incremental contributions of competitive strategies. Third, the study was limited to a single recently open transition economy in Sub-Saharan Africa, which may affect its generalizability to transition economies in Asia, Latin America, and Central and Eastern Europe. However, the business and economic environment in Ghana created by economic liberalization may be similar to those in other low-income Sub-Saharan African countries and thus the findings could be generalized to those environments.

7. Conclusion

This is one the few empirical studies that have examined the incremental performance benefit of implementing a combination strategy over a singular strategy. The study further uses a unique dataset from a transition economy in Sub-Saharan Africa. The study demonstrates that

implementing a combination strategy is not always beneficial in transition economies. Our findings suggest that firms in transition economies that are implementing the cost-leadership strategy may reap greater performance benefits by supplementing it with the differentiation strategy. However, for firms implementing the differentiation strategy it may not be advisable for them to supplement it with cost-leadership and should instead continue their focus on differentiation attributes that make them unique. Furthermore, our findings indicate that firms that implement a coherent competitive strategy outperform those that are 'stuck-in-the-middle'.

We hope that this paper has contributed positively to the debate on the competitive strategy-performance relationships by extending previous studies and by shedding light on the incremental performance benefits of implementing combination strategy in transition economies (e.g., Kim and Lim, 1988, Kim et al., 2004, Spanos et al., 2004).

Acknowledgements

Paul Nystrom and Ehsan Soofi provided valuable comments and suggestions on earlier versions of this paper. We also appreciate the comments and suggestions from the Associate Editor Jean McGuire and two anonymous reviewers. All remaining errors are solely our responsibility.

References

- Anand J, Brenes ES, Karnani A, Rodriquez A. Strategic responses to economic liberalization in emerging economies: lessons from experience. *J Bus Res* 2006;59:365–71.
- Bae J, Lawler JJ. Organizational and HRM strategies in Korea: impact on firm performance in an emerging economy. *Acad Manage J* 2000;43:502–17.
- Bowman C, Ambrosini V. Perceptions of strategic priorities, consensus, and firm performance. *J Manag Stud* 1997;34:241–58.
- Campbell-Hunt C. What have we learned about generic competitive strategy? A meta-analysis. *Strateg Manage J* 2000;21:127–54.
- Dean JW, Evans JR. Total quality: management, organization and strategy. St. Paul, MN: West Publishing Co.; 1994.
- Dess GG, Davis PS. Porter's (1980) generic strategies as determinants of strategic group memberships and organizational performance. *Acad Manage J* 1984;27:467–88.
- Hambrick DC. High profit strategies in mature capital goods industries: a contingency approach. *Acad Manage J* 1983;26:687–707.
- Hill CWL. Differentiation versus low cost or differentiation and low cost: a contingency framework. *Acad Manage Rev* 1988;13:401–12.
- Ishikura Y. Canon, Inc.: worldwide copier strategy. Boston: Harvard Business School Case Services; 1983.
- Jones GR, Butler JE. Costs, revenue, and business-level strategy. *Acad Manage Rev* 1988;13:202–13.

- Karnani A. Generic competitive strategies — an analytical approach. *Strateg Manage J* 1984;5:367–80.
- Khanna T, Palepu K. Why focused strategies may be wrong for emerging markets. *Harvard Bus Rev* 1997;75(4):41–51 [July–August].
- Khanna T, Palepu K. Emerging giants: building world-class companies in developing countries. *Harvard Bus Rev* 2006;84(10):60–9 [October].
- Kim L, Lim Y. Environment, generic strategies, and performance in a rapidly developing economy: a taxonomic approach. *Acad Manage J* 1988;31:802–27.
- Kim E, Nam D, Stimpert JL. Testing the applicability of Porter's generic strategies in the digital age: a study of Korean cyber malls. *J Bus Strateg* 2004;21:19–45.
- Kotha S, Vadlamani BL. Assessing generic strategies: an empirical investigation of two competing typologies in discrete manufacturing industries. *Strateg Manage J* 1995;16:75–83.
- Kotha S, Dunbar RLM, Bird A. Strategic action generation: a comparison of emphasis placed on generic competitive methods by U.S. and Japanese managers. *Strateg Manage J* 1995;16:195–220.
- Leechor C. Ghana: forerunner in adjustment. In: Hussain I, Faruque R, editors. *Adjustment in Africa*. Washington DC: The World Bank; 1994. p. 153–92.
- Mia L, Clarke B. Market competition, management accounting systems and business unit performance. *Manag Account Res* 1999;10:137–58.
- Miller D. Configurations of strategy and structure: towards a synthesis. *Strateg Manage J* 1986;7:233–49.
- Miller A, Dess GG. Assessing Porter's (1980) model in terms of its generalizability, accuracy and simplicity. *J Manag Stud* 1993;30:553–85.
- Murray AI. A contingency view of Porter's “Generic Strategies”. *Acad Manage Rev* 1988;13:390–400.
- Porter ME. *Competitive strategy: techniques for analyzing industries and competitors*. New York: Free Press; 1980.
- Porter ME. *Competitive advantage: creating and sustaining superior performance*. New York: Free Press; 1985.
- Porter ME. What is strategy? *Harvard Bus Rev* 1996;74:61–78 [November–December].
- Robinson RB, Pearce JA. Planned patterns of strategic behavior and their relationship to business unit performance. *Strateg Manage J* 1988;9:43–60.
- Sashi CM, Stern LW. Product differentiation and market performance in producer goods industries. *J Bus Res* 1995;33:115–27.
- Spanos YE, Zaralis G, Lioukas S. Strategy and industry effects on profitability: evidence from Greece. *Strateg Manage J* 2004;25:139–65.

- Venkatraman N, Ramanujam V. Measurement of business performance in strategy research: a comparison of approaches. *Acad Manage Rev* 1986;11:801–14.
- Wall TD, Michie J, Patterson M, Wood SJ, Sheehan M, Clegg CW, West M. On the validity of subjective measures of company performance. *Pers Psychol* 2004;57:95-118.
- Wright P. A refinement of Porter's generic strategies. *Strateg Manage J* 1987;8:93-101.
- Wright P, Hotard D, Kroll M, Chan P, Tanner J. Performance and multiple strategies in a firm: evidence from the apparel industry. In: Dean BV, Cassidy JC, editors. *Strategic management: methods and studies*. New York, NY: Elsevier-North Holland; 1990.
- Wright P, Kroll M, Tu H, Helms M. Generic strategies and business performance: an empirical study of the screw machine products industry. *Br J Manag* 1991;2:1–9.
- Yasai-Ardekani M, Nystrom PC. Designs for environmental scanning systems: tests of a contingency theory. *Manag Sci* 1996;42:187–204.