Competitive strategy, environmental characteristics and performance in African emerging economies: Lessons from firms in Ghana

By: Moses Acquaah, Mike C. Adjei, and Isaac F. Mensa-Bonsu

Abstract:

This paper examines the impact of the implementation of competitive strategy on organizational performance in response to economic liberalization policies using survey data from organizations in Ghana. We also examine how the perceived intensity of industry competition and industry sector moderate the relationship between competitive strategy and organizational performance. The results show that the implementation of the competitive strategies of low-cost, differentiation, and integrated low-cost and differentiation were all positively related to performance (return on assets and return on sales). We also find that both industry competition and industry sector moderate the relationship between differentiation strategy and return on assets. Moreover, industry competition moderates the relationships between both low-cost and differentiation strategies and return on sales. The results indicate that implementing a clearly defined competitive strategy is beneficial to organizations experiencing significant changes in the environment due to economic liberalization. The findings also suggest that while low-cost strategy is more beneficial to organizations in a highly competitive industry, differentiation strategy is more beneficial to firms in lowly competitive industry. At the same time, organizations in the manufacturing sector benefit more than those in the service sector when they implement the differentiation strategy. Managerial implications are presented.

Article:

Increased globalization of the world economy over the past two decades has made it imperative for countries to improve their competitiveness both in the domestic and international markets. As a result, many countries in the emerging economies of Africa, Asia, and Latin America have embarked on transforming their economic and business environments by implementing

economic liberalization policies. The contents of the economic liberalization policies being implemented in most African economies include privatization of state-owned enterprises, removal of barriers to foreign trade in the form of import controls and foreign exchange restrictions, removal of price controls and domestic production subsidies, and monetary and banking reforms (Debrah, 2002).

Economic liberalization has opened up the economies of these emerging economies to both domestic and international competition in an unprecedented way. Domestic firms that were formally protected from local and international competition are now experiencing not only significant changes in their business environment, but also face considerable challenges in competing with established and internationally-recognized firms. The strategic management literature has emphasized the importance of designing and implementing a viable business strategy in order for a firm to maintain and improve its competitiveness in the ever-changing business environment in emerging or transition economies (e.g., Anand et al., 2006; Hoskisson et al., 2000; Khanna and Palepu, 2006; Kim and Lim, 1988; Meyer and Tran, 2006). According to Anand et al. (2006), a successful response to economic liberalization demands that domestic firms adopt a strategy that encompasses the following five strategic dimensions: changes in strategic perspective, business scope, corporate governance, management teams and operational strategies.

Despite a plethora of studies examining the relationship between firms' competitive strategic orientation and organizational outcomes (see Campbell-Hunt, 2000), their primary focus has been on advanced economies. Studies examining firms' competitive strategies outside the advanced industrialized world have concentrated their efforts in emerging economies in Europe (e.g., Green, Lisboa, and Yasin, 1993; Spanos, Zaralis and Lioukas, 2004), Asia (e.g., Kim and Lim, 1988; Kim, Nam, and Stimpert, 2004; Liff, He, and Steward, 1993), and Latin America (e.g., Aulakh, Kotabe and Teegen, 2000). Studies using data from Sub-Saharan Africa is virtually non-existent.

The objective of this paper is two-fold: (1) examine how the implementation of competitive strategy affects organizational performance using data from Ghana, an emerging Sub-Saharan African economy, which has, in recent years, adopted economic liberalization policies; and (2) investigate how the relationship between competitive strategy and organizational performance is moderated by the environmental characteristics of perceived intensity of industry competition and the industry sector in which firms conduct business activities (manufacturing sector versus service sector). This paper adds to the studies investigating firms' competitive strategic issues in emerging economies by using empirical data from Ghana on the actual strategic actions taken by domestic firms in their new competitive environment created by the implementation of economic liberalization. In addition, it examines the implications of economic liberalization on the strategic activities of domestic firms in their quest to become competitive and profitable. The general framework for the empirical analysis is shown in Figure 1, which indicates that although competitive strategy directly influences organizational performance, that relationship is moderated by environmental characteristics.
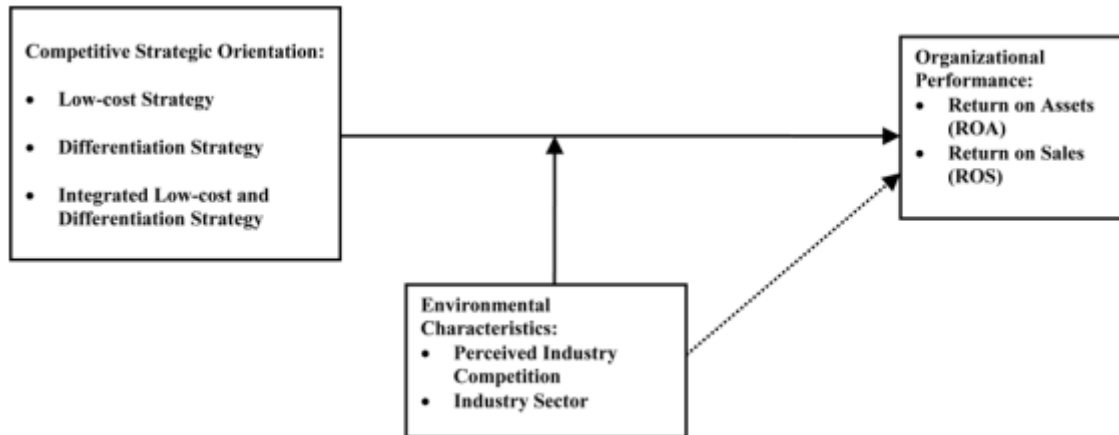
FIGURE 1. A Model of Competitive strategy, Environmental Characteristics and Organizational Performance

THEORETICAL BACKGROUND

Strategic management researchers have developed a number of typologies to categorize the strategies that a firm can pursue at the business unit level in order to realize its goals (Abell, 1980; Miles and Snow, 1978; Mintzberg, 1988; 1980, 1985). The most widely used strategy types are those developed by Miles and Snow (1978) and Porter (1980, 1985). We focus on Porter's typology for several reasons. First, Porter's typology of the generic strategies of cost leadership, differentiation and focus integrates the central concepts of the other typologies and has been found to be internally consistent (Dess and Davis, 1984; 1983). For example, Porter's cost leadership strategy is similar to Miles and Snow's (1978) defenders and Hambrick's (1983) efficient misers. Also Porter's differentiation strategy is similar to Miles and Snow's prospectors. Second, Porter's typology has been widely used for empirical research in emerging economies more than any other typology (e.g., Aulakh et al., 2000; Kim and Lim, 1988; Kim et al., 2004; Spanos et al., 2004). Third, Porter's typology is inherently related to firm outcomes (Kim, et al., 2004).

Porter (1980, 1985) argued that the generic competitive strategies of low-cost, differentiation, and focus (low-cost or differentiation in a narrow market segment) represent different strategic orientations available to a firm to compete in its industry. Porter claimed that a firm that pursues any of these strategic orientations would acquire a competitive advantage that would enable it to outperform industry competitors. We focus on the generic strategies of low-cost and differentiation because of the difficulties of capturing the focus strategy, which is the pursuit of either a low-cost strategy or a differentiation strategy in a narrow market segment. A firm that implements a low-cost strategy achieves competitive advantage by becoming the lowest cost producer or service provider in the industry. A low-cost firm emphasizes "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, and so on" (Porter, 1980: 35). A firm can, therefore, gain a competitive advantage over its rivals through achieving the lowest cost structure in an industry without ignoring other areas such as product and service quality (1980).

On the other hand, a firm that implements a differentiation strategy develops a competitive advantage by creating a product or service that is unique or perceived to be unique in the minds of customers. The firm creates the perception that the firm or its products and services are superior to those of its competitors and also possess characteristics (e.g., design, quality, innovativeness) that are distinctive from those of its competitors (Miller; 1988; 1985). A firm generates these perceptions through advertising programs, marketing techniques and methods, offering products with greater reliability, durability, features and aesthetics, and superior performance than their competitors (Dean and Evans, 1994; Mintzberg, 1988, 1985). The differentiation strategy is typically bolstered by heavy investment in research and development, marketing, and product and service innovation.

Porter (1980, p. 41), however, argues that if a firm fails to develop its strategic orientation in at least one of the three directions–cost leadership, differentiation, or focus–it would be "stuck in the middle." Such firms possess no competitive advantage and are almost guaranteed low profitability. Furthermore, Porter (1985, p. 17) contends that low-cost and differentiation are mutually exclusive as each represents "a fundamentally different approach to creating and sustaining a competitive advantage." Thus, for a firm to earn superior profits and outperform its competitors, it must make a clear choice between low-cost and differentiation strategies in order to avoid "the inherent contradictions of different strategies" (Porter, 1996: 67). Porter (1996) further stated that a firm outperforms its competitors only if it can establish a difference that it can preserve. He acknowledged that firms may simultaneously pursue differentiation and low-cost strategies (i.e., a combination strategy) (Porter, 1985 & 1996). However, he suggested that advantages conferred by pursuit of a combination strategy are short-lived since a firm that implements a combination strategy is vulnerable to a competitor who stresses either a low-cost or a differentiation strategy. He argued that a firm can only implement a combination strategy and perform better than its competitors 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 (1985).

On the theoretical front, several studies have advanced support for the efficacy of pursuing low-cost and differentiation strategies simultaneously. Karnani (1984), Hill (1988), Jones and Butler (1988), and Murray (1988) showed that it is feasible to combine generic competitive strategies of low-cost and differentiation under certain conditions. Using a game theoretic approach, Karnani (1984) demonstrated that it is feasible for firms to successfully pursue a combination strategy by achieving lower cost, which is independent of scale. Hill (1988) argued that under certain industry environments, a differentiation strategy may be pursued in order to achieve a low-cost position. He asserted that in emerging industries characterized by high growth and in mature industries experiencing rapid technological change, the presence of economies of scale, economies of scope, and new learning effects facilitate simultaneous pursuit of differentiation and low cost strategies. Murray (1988) also argued that the preconditions for the viability of low cost and differentiation strategies stem from industry structure and customer taste preferences respectively. Because these two factors (industry structure and customer tastes) are independent, the possibility of a firm pursuing low-cost and differentiation strategies simultaneously is not precluded. Jones and Butler (1988), using a transaction cost framework, argued that both low-cost and differentiation strategies are subject to the same production and transaction costs trade-offs. They demonstrated that a firm that simultaneously pursues low-cost and differentiation

strategies can achieve a lower average total cost as compared to a firm that pursues a pure differentiation strategy or low cost strategy. Thus, a firm that pursues a combination strategy may be able to reap the benefits of lower costs and premium prices simultaneously.

Empirically, previous studies of the competitive strategy-performance relationship using Porter's (1980) typology, which have mostly focused on advanced countries, have provided support for the viability and profitability of implementing pure low-cost and differentiation strategies (Beal and Yasai-Ardekani, 2000; Bowman and Ambrosini, 1997; Campbell-Hunt, 2000; Dess and Davis, 1984; Hambrick, 1983; Kotha and Vadlamani, 1995; Miller and Dess, 1993; Miller and Friesen, 1986; Nayyar, 1993; Wright et al., 1991). However, the performance implications of implementing low-cost and differentiation strategies simultaneously have yielded equivocal results. While some empirical studies have corroborated Porter's thesis that firms that implement a combination strategy of low-cost and differentiation will perform worse than those that implement either a pure low-cost strategy or a pure differentiation strategy (Dess and Davis, 1984; Hambrick, 1983; Robinson and Pearce, 1988; see also the meta-analysis by Campbell-Hunt, 2000), others have found support for low-cost and differentiation strategies simultaneously (Bowman and Ambrosini, 1997; Miller and Dess, 1993; Wright et al., 1990, 1991).

What are the direct and contingent effects of Porter's generic competitive strategies on organizational outcomes in emerging economies? Before we examine the competitive strategy literature in emerging economies, we provide a brief description of the economic environment in African emerging economies because it is different from what pertains in advanced economies. Africa's emerging economies have historically insulated domestic firms from global and sometimes even local competition. These countries are currently transforming their economies from state-controlled to free market capitalist systems. Their governments have been implementing economic transformation policies for more than two decades, which have dismantled protectionist barriers, created market-friendly institutions and integrated those economies into the global economy. However, as the expected positive impact of economic liberalization has been slow to take hold, emerging economies are still characterized by a high level of market imperfections, generally suffering from what Khanna and Palepu (1997, 2006) call "institutional voids." Institutional voids depict the absence of market-supporting institutions, specialized intermediaries, contract-enforcing mechanisms, and efficient transportation and communications networks. As a result of these institutional voids, key raw materials are usually unavailable to firms, easy access to capital at a reasonable cost and managerial and technical talents are also difficult to obtain. Clearly, managerial talents that were once very useful in a protected business environment may not be effective in meeting customer needs in a liberalized environment experiencing intense competition (Anand et al., 2006). These institutional voids may increase business transactions costs and business risks and inhibit the efficient functioning of market institutions, thus requiring different strategic responses by firms in emerging economies.

Empirical studies examining Porter's framework in emerging economies in Asia, Latin America, and Europe have also provided support for the economic viability of implementing low-cost and differentiation strategies, but contradictory findings in terms of combination strategies (Aulakh et al., 2000; Kim and Lim, 1988; Kim et al., 2004; Spanos et al., 2004). Aulakh et al. (2000) found

that while both low-cost and differentiation strategies were positively related to export performance among firms from Brazil, Chile, and Mexico, the combination strategy (integration of low-cost and differentiation) was not significantly related to export performance. Kim and Lim (1988) showed that low-cost, differentiation and the combination strategy of low-cost and differentiation were positively related to firm performance in Korea. Kim et al. (2004) found that business-to-customer (B2C) firms, obtained from a Korean online shopping mall, pursing the low-cost, differentiation and combination of cost leadership and differentiation strategies experienced significant performance benefits. They also found that firms pursing the combination strategy performed better than firms pursing the pure low-cost and differentiation strategies.

Using data from Greece, Spanos et al. (2004) found that while most combination strategies were positively related to price-cost margin (the measure of profitability), the pure strategies of low-cost, marketing differentiation and technology differentiation were either not significant or negatively related to profitability. In summarizing their results, they stated that "(i) the three most successful hybrid strategies are those that comprise two or three strategy dimensions, with low cost being one of the dimensions emphasized; (ii) the three less successful strategies are those that either emphasize only one dimension or, when emphasizing two, do not include low cost as a key component" (Spanos et al., 2004: 153–154).

COMPETITIVE STRATEGY AND PERFORMANCE

Direct Effects

Low-Cost Strategy

Low-cost strategy is widely pursued by firms that manufacture or offer standardized products and services in emerging economy markets. This is because, with the low level of incomes in emerging economies, price is an important factor influencing consumer choice and purchasing decisions. The maintenance of a strong competitive position for organizations implementing low-cost strategies places a premium on efficiency of operations that enables them to sustain their profit margins for a considerable period of time. It has been shown that the increase in competition in the manufacturing sector in Ghana as a result of the economic liberalization policies has challenged manufacturing firms not only to produce quality goods but also become more efficient in their productive activities (2005). Firms that implement a low-cost strategy are able to secure a relatively large market share by being the lowest cost producers or service providers in their industry or market. Thus, firms implementing the low-cost strategy can obtain above-normal profits because of their ability to lower prices to match or even offer them below those of competitors and still earn profits. As demonstrated above, the low-cost strategy has been shown to improve performance in emerging economies (Aulakh et al., 2000; Kim and Lim, 1988; Kim et al., 2004; Spanos et al., 2004). We, therefore, hypothesize that:

> *Hypothesis 1: The implementation of a low-cost strategy will be positively related to organizational performance.*

Differentiation Strategy

As discussed earlier, a differentiation strategy should be developed around many characteristics such as product quality, technology and innovativeness, reliability, brand image, firm reputation, durability, and customer service (which must be difficult for rivals to imitate). A firm implementing a differentiation strategy is able to achieve a competitive advantage over its rivals because of its ability to create entry barriers to potential entrants by building customer and brand loyalty through advertising and marketing techniques. Thus, a firm that implements a differentiation strategy enjoys the benefit of price-inelastic demand for its product or service. This would in turn help the firm to avoid potentially severe price competition and allow it to charge premium prices leading to above-normal profits (1980). Although the average disposable income in emerging economies such as Ghana is low, consumers' preference for quality and branded merchandise has increased because of their exposure to foreign made goods as a result of the implementation of economic liberalization policies making the differentiation strategy both appealing and profitable. The studies examining Porter's (1980) framework in emerging economies have established that the implementation of a differentiation strategy leads to superior performance (Aulakh et al., 2000; Kim and Lim, 1988; Kim et al. 2004; Spanos et al., 2004). We, therefore, present our second hypothesis:

> *Hypothesis 2: The implementation of a differentiation strategy will be positively related to organizational performance.*

Integrated Low-Cost and Differentiation Strategy

Competitive strategies involving more than one generic strategy have been shown to be viable and profitable in both advanced industrialized economies and emerging economies (e.g., Kim et al., 2004; Miller and Dess, 1993; Spanos et al., 2004; Wright et al., 1991). Competitive advantages such as economies of scale, scope and learning effects conferred by the implementation of a low-cost strategy are difficult to maintain because most firms in emerging economies such as Ghana concentrate on products that are in the growth and maturity stages of their life cycle. In a business environment experiencing rapid changes due to the implementation of economic liberalization policies, there is the need for firms to be more agile and flexible, as well as possess the ability to integrate multiple competitive strategies to be successful. Therefore, firms in Ghana that also pursue a differentiation strategy in addition to the low-cost strategy simultaneously may achieve higher performance because it will help minimize their vulnerability due to a reliance on only cost based advantages. Furthermore, firms that pursue a differentiation strategy may also be able to further strengthen their competitive position vis-à-vis their rivals by simultaneously pursing a low-cost strategy. Thus, we propose that adding a further dimension to a firm's strategic orientation will help reduce the firm's vulnerability and increase its performance. Competitive advantage created through the pursuit of more than one competitive strategy will help protect the firms' position from erosion due to competitors' actions. The following hypothesis, therefore, follows.

> *Hypothesis 3: The simultaneous implementation of low-cost strategy and differentiation strategy (integrated low-cost and differentiation strategy) will be positively related to organizational performance.*

The Moderating Effects of Environmental Characteristics

Perceived Intensity of Industry Competition

The relationship between the competitive strategic responses of firms to environmental conditions and changes have been examined by many researchers in the strategic management literature (e.g., Anand et al., 2006; Govindarajan, 1988; Lukas, Tan and Hult, 2001; 1988). Miller (1988) found that the effect of competitive strategies on firm performance is contingent on the environment. The performance impact of the implementation of a low-cost strategy was higher in a stable or less competitive environment, while that for the differentiation strategy was higher in a volatile or intensely competitive environment. Lukas et al. (1988) found mixed results with data from China, a country going through economic transition. While a differentiation-based strategy was more related to performance in environments with lower levels of dynamism and hostility, it was also more related to performance at higher levels of environmental complexity. Furthermore, the impact of a low-cost-based strategy on performance was not contingent on environmental complexity and hostility. Nevertheless, a low-cost strategy had a greater impact on performance in environments with lower levels of dynamism.

The implementation of the economic liberalization policy in Ghana has created a highly competitive business environment. Consumers have been exposed to a greater variety of products leading to an increase in the level of price competition and the quality of products and services offered. Thus, firms implementing the low-cost strategy would perform better in a lowly competitive environment because they focus on increasing the efficiency of existing operations and make every effort to serve stable and narrowly defined products and services in a cost-efficient manner. This strategy is consistent with an environment experiencing minimal or no changes. Conversely, firms implementing a differentiation strategy would perform better in a highly competitive environment. Competitive environments encourage firms to formulate and implement strategies that would enable them to create a unique image for a product or service and thus differentiate them from rivals. Differentiation methods such as advertising, higher quality and durability, innovativeness are more effective in highly competitive environments. We, therefore, present the following two hypotheses:

> *Hypothesis 4: The positive relationship between low-cost strategy and organizational performance will be stronger for firms that perceive to be in a lowly competitive industry compared to those in a highly competitive industry.*

> *Hypothesis 5: The positive relationship between differentiation strategy and organizational performance will be stronger for firms that perceive to be in a highly competitive industry compared to those in a lowly competitive industry.*

Industry Sector

Various industry sectors may place different emphases on the implementation of competitive strategies of low-cost and differentiation. Although the competitive environment created by economic liberalization affects firms in both the manufacturing and service sectors, firms in the

former experience the greater brunt of its impact because economic liberalization brings with it the availability of wide-ranging choices of products from foreign countries for consumers and an increase in the demand for quality products at lower prices. Firms in the manufacturing sector especially need to pay more attention to developing and leveraging their resources and capabilities to manufacture quality products in an efficient manner at affordable prices. Thus, they have to become more consumer- and competitor-oriented by implementing strategies that enhance product quality, engage consumers and leverage marketing capabilities in order to improve their competitiveness in the domestic market so as to effectively compete with foreign imports.

Conversely, firms in the service sector such as financial services (banking, insurance, etc), transportation, and building construction do not face as much competition as those in the manufacturing sector because the services that they offer are, generally, localized or locally based. Moreover, despite the fact that firms in the services sector should be more relationship-intensive because of their constant contact with consumers, most service firms in developing countries such as Ghana are poor service providers, partly due to limited competition. Thus, they are more likely to focus on strategies that reduce cost to improve their competitiveness in the domestic market. With this assertion, we present the following hypotheses.

> *Hypothesis 6: The relationship between cost-leadership strategy and organizational performance will be moderated by industry sector. The positive relationship between low-cost strategy and organizational performance will be stronger for service firms than for manufacturing firms.*

> *Hypothesis 7: The relationship between differentiation strategy and organizational performance will be moderated by industry sector. The positive relationship between differentiation strategy and organizational performance will be stronger for manufacturing firms than for service firms.*

METHODS

Data Collection

We collected data for this study as part of a larger study from senior executives (chief executive officers (CEOs)/managing directors (MDs) and their deputies) of manufacturing and service firms operating in Ghana. 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 (AGI). To solicit participation in the study, we sent letters to the CEOs/MDs of each of the selected companies. The letter explained the purpose of the study and requested their cooperation in completing the questionnaires. To ensure a high response rate and the provision of reliable and accurate responses, the CEOs were promised confidentiality of the information provided. Thus, the respondents were not required to identify themselves. However, they were asked to indicate their position in the company. They were also promised a summary of the results of the study if they include their company addresses.

Several weeks after the letters were sent to the selected companies; the researchers personally visited the companies, gave the questionnaires to the CEOs/MDs and agreed on a date to collect the completed questionnaires. After several visits, we received responses from 115 companies. However, only 106 of the responses were complete, thus yielding a usable response rate of 53 percent. To ensure that the items measuring the competitive strategy and industry competition variables represented their underlying constructs, we assessed their internal consistency using Cronbach's Alpha coefficients. All the coefficients are above the lower limit of acceptability, generally considered to be around 0.60 (Nunnaly, 1978). The Cronbach Alphas of the competitive strategy and industry competition variables are shown in Table 2.

Measurement of Variables

Organizational Performance

Since almost all the companies were privately-held, objective performance data were not available. Therefore, subjective performance information was requested 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; Tan and Peng, 2003). At the time of the data collection, the Ghana Stock Exchange (GSE) had 22 companies listed on the exchange. Although we sent questionnaires to all the companies listed on the GSE, only 12 of those companies provided complete responses to our survey. Given that organizational performance is a multidimensional construct, in order to establish a robust measure of firm performance, we asked the respondents to rate their firms on two measures of performance (return on assets and return on sales) relative to the major competitors in their industry over the past three years. The performance items were measured on a scale ranging from (1) 'much worse' to (7) 'much better.' The comparison of each organization's performance relative to their 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, we asked for performance over a three-year period to minimize the influence of short-term variations on the reported organizational performance.

Competitive Strategy

We used 16 competitive methods which have been used extensively to operationalize Porter's (1980) generic competitive strategies (e.g., Dess and Davis, 1984; Kotha, Dunbar and Bird, 1995; Kotha and Vadlamani, 1995; Miller and Dess, 1993). The respondents were asked to assess the extent to which their organizations have emphasized the competitive methods over the past three years on a seven-point Likert-type scale ranging from (1) "much less" to (7) "much more." Based on a factor analysis of the competitive methods, two factors emerged–low-cost and differentiation strategies (see Table 1 for the factor analysis results).

Low-cost strategy was operationalized by averaging the following six items: offering a broad range of products/services; operating efficiency; offering competitive pricing for products/services; forecasting market growth in sales; control of operating and overhead costs; and innovation in production process or service offerings. *Differentiation strategy* was measured by averaging the following seven items: upgrading or refining existing products/services;

products or services for high priced market segments; improvement of existing customer service; innovation in marketing products/services; advertising and promotion of products/services; developing new products or services; and building brand and company identification. The other three competitive strategy methods–emphasizing high quality standards or high quality service; offering specialty products or services; and effective control of distribution channels–cross-loaded on the two factors and were not used in operationalizing the low-cost strategy and differentiation strategy constructs.

TABLE 1. Factor Analysis of Competitive Strategy Method Items∗

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∗∗	0.636	0.453
Effective control of distribution channels∗∗	0.522	0.433
Low-cost 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∗∗	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

∗Method used was principal component analysis with varimax rotation. Factor loadings greater than an absolute value of 0.40 are shown in bold font. ∗∗All items that loaded on more than one factor were excluded from operationalizing the competitive strategy variables.

Porter (1980, 1985) has argued that it is not advisable for a firm to pursue both low-cost strategy and differentiation together because the company will be "stuck-in-the-middle." To examine the feasibility of pursuing the combination of low-cost and differentiation strategies simultaneously, we created two other measures and included them in separate models–(1) the interaction between the low-cost strategy and differentiation strategy (*low-cost x differentiation*), the most commonly used measure of the combination of low-cost and differentiation strategies; and (2) an *integrated low-cost and differentiation strategy* using a dummy variable. Any firm whose composite values for both the low-cost and differentiation strategies were higher than the mean of each of the respective strategies is considered to be implementing the *integrated low-cost and differentiation strategy* and is coded 1, while all others firms are *not* considered to be implementing that strategy and therefore coded 0.

Moderating and Control Variables

Due to the fact that standard industry classification schemes were not available through secondary sources, we used two variables to control for the effects of environmental characteristics as well as measuring the moderating variables–the *industry sector* where a firm conducts its business activities and the *perceived intensity of industry competition. Industry sector* was measured using a dummy variable, coded 1 for firms in the manufacturing sector and 0 for firms in the service sector. *The perceived intensity of industry competition* was measured using a previously validated instrument that has been used in an economic environment that has experienced economic liberalization (Mia and Clarke, 1999). The respondents were asked to indicate the extent to which the following activities have taken place in their organization's industry for the past three years: (1) increase in the number of major competitors; (2) use of package deals for customers; (3) frequency of new products or service introductions; (4) the rate of change in price manipulations; (5) increase in the number of companies that have access to the same marketing channels; and (6) the frequency of changes in government regulations affecting the industry. These activities were measured on a seven-point scale ranging from (1) 'very little' to (7) 'very extensive.'

We also controlled for factors that may influence a firm's ability to increase their performance. Specifically, the control variables were *firm size* and *firm ownership. 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.

TABLE 2. Descriptive Statistics and Correlation

Variables	Mean	Standard Deviation	1	2	3	4	5	6	7	8
1. Return on Assets (ROA)	4.64	1.38								
2. Return on Sales (ROS)	4.74	1.36	0.80***							
3. Firm Size (Log number of employees)	1.91	0.53	0.13	0.24*						
4. Firm Ownership [a]	0.28	0.45	0.06	0.14	0.43***					
5. Industry Sector [a]	0.83	0.38	−0.19*	−0.13	−0.24*	0.06				
6. Industry Competition	4.79	1.25	0.43***	0.44***	−0.01	0.09	−0.09	0.72		
7. Low-cost Strategy	4.88	1.16	0.26**	0.28**	0.23*	0.14	0.17 +	0.09	0.83	
8. Differentiation Strategy	4.69	1.19	0.34***	0.37***	0.11	0.01	−0.06	0.18 +	0.01	0.84
9. Low-cost strategy × Differentiation strategy [b]	0.01	1.44	−0.12	−0.11	0.06	−0.05	0.01	−0.04	0.37***	0.11

[a] Ownership is a dummy variable (1 if wholly owned local companies; 0 if joint venture between local and foreign national); Industry sector is a dummy variable (1 if manufacturing sector firm; 0 if service sector firm). [b] The interaction between low-cost strategy and differentiation strategy was calculated by first de-meaning the variables (i.e., subtracting the mean of each variable from its constituent part) and then multiplying the de-mean variables. Significance level: + $p < 0.10$; *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$. The values in diagonals are Cronbach Alphas which measure the reliability.

Estimation Procedures

We use a hierarchical multiple regression analysis to examine the impact of competitive strategy on firm performance, and the moderating role of environmental characteristics. First, we examine the relationship between the control variables and performance. Second, we add both and competitive strategy variables of low-cost, differentiation, and low-cost × differentiation or

integrated low-cost and differentiation to the control variables to test hypotheses 1 to 3. Third, we add the mean-centered interactions between competitive strategy (low-cost and differentiation) and the environmental characteristics (industry competition and industry sector) to the control and competitive strategy variables to examine the moderating effects (hypotheses 4 to 7). We examine the validity of the econometric model by performing several tests. The assumptions of equality of variance, independence of the error term and the normality of the residual were all met. Moreover, the variance inflation factors (VIFs) showed no multicollinarity among the variables. The bivariate correlations among the variables are shown in Table 2.

RESULTS

Tables 3 and 4 present the results of the hierarchical regression analysis using return on assets (ROA) and return on sales (ROS) as performance variables respectively. The estimation results presented in Tables 3 and 4 show that industry competition is positive and significantly related to ROA (Model 1), while both firm size and industry competition are positive and significantly related to ROS (Model 5). The results indicate that larger firms perform better than smaller firms in terms of ROS, and firms that perceive competition in their industry to be intense experience higher levels of performance (ROA and ROS). Models 2 and 6 are estimated to test hypotheses 1 to 3. In Models 2a and 6a, the competitive strategy variables of low-cost and differentiation and the interaction between low-cost and differentiation (low-cost × differentiation) are added to the control models. But in Models 2b and 6b we include the dummy variable measuring the integrated low-cost and differentiation strategy instead of the low-cost × differentiation strategy. In Models 2a and 6a, where we enter low-cost, differentiation, and low-cost × differentiation, all the competitive strategy variables are significant. Low cost and differentiation are positively related to performance, while the low-cost × differentiation strategy is negatively related to performance.

On the contrary, in Models 2b and 6b, where we enter the integrated low-cost and differentiation strategy variable all the competitive strategy variables are significant and positively related to performance. The results in Models 2b and 6b provide support for hypotheses 1, 2, and 3, which state that the implementation of the low-cost strategy, the differentiation strategy and the integrated low-cost and differentiations strategies will be positively related to performance respectively. The results from Models 2 and 6 clearly demonstrate that a combination competitive strategy cannot be captured by an interaction between low-cost and differentiation (discussed in more detail below). It should be noted that the inclusion of the competitive strategy variables explained between 12.1% (ROA) and 15.2% (ROS) of the variance in performance (Models 2b and 6b).

Models 3 and 7 are estimated to test hypotheses 4 and 5. In hypothesis 4, we posit that the positive relationship between low-cost strategy and organizational performance will be stronger for firms that perceive competitive intensity in their industry to be lower than for those that perceive that the competitive intensity in their industry is higher. For the hypothesis to be supported, the interaction between low-cost strategy and industry competition should be negative and significant. This prediction was not supported as the coefficient for the interaction term (low-cost strategy × industry competition) is positive and statistically significant only to ROS. Hypothesis 5 states that the positive relationship between differentiation strategy and

organizational performance will be stronger for firms that perceive that the competitive intensity in their industry is higher than for those that perceive competitive intensity in their industry to be less. For the hypothesis to be supported, the interaction between differentiation strategy and industry competition should be positive and significant. Contrary to our prediction, this hypothesis is also not supported as the coefficients are negative and statistically significant in the ROA and ROS models.

TABLE 3. Analysis of the Effects of Competitive Strategy on Firm Performance (Return on Assets) [a]

Variables	Hypothesis (Expected Sign)	Model 1	Model 2a	Model 2b	Model 3	Model 4
Constant		2.295**	−0.429	−0.752	−0.268	0.114
		(0.821)	(0.942)	(1.126)	(1.191)	(1.208)
Firm size		0.280	0.112	0.096	0.053	0.127
		(0.268)	(0.248)	(0.254)	(0.255)	(0.250)
Industry sector [b]		−0.466	−0.284	−0.473	−0.528 + (0.320)	−0.821*
		(0.338)	(0.311)	(0.325)		(0.343)
Firm ownership		−0.055	−0.133	−0.045	−0.037	0.058
		(0.304)	(0.278)	(0.284)	(0.283)	(0.275)
Industry competition		0.462***	0.371***	0.406***	0.395***	0.419***
		(0.098)	(0.091)	(0.093)	(0.093)	(0.092)
Hypothesized Variables						
Low-cost strategy	H1 (+)		0.359***	0.382**	0.329*	0.297*
			(0.107)	(0.134)	(0.142)	(0.139)
Differentiation strategy	H2 (+)		0.344***	0.432***	0.426***	0.377**
			(0.095)	(0.122)	(0.122)	(0.123)
Low-cost strategy × Differentiation strategy			−0.245**			
			(0.084)			
Integrated Low-cost and differentiation strategies	H3 (+)			0.637*	0.588 + (0.317)	0.542 + (0.318)
				(0.315)		
Moderating Effects Low-cost strategy × Industry competition	H4 (−)				0.074	0.107
					(0.156)	(0.153)
Differentiation strategy × Industry competition	H5 (+)				−0.219 + (0.131)	−0.220 + (0.133)
Low-cost strategy × Industry sector	H6 (−)					−0.730
						(0.549)
Differentiation strategy × Industry sector	H7 (+)					1.418**
						(0.536)
R^2		0.219	0.375	0.340	0.365	0.408
Change in R^2			0.156	0.121	0.025	0.046
F-test for Change in R^2 [c]			8.15***	5.99***	1.89 +	3.65*
Model F		7.06***	8.41***	7.20***	6.06***	5.88***

[a] The values in parentheses are standard errors of the coefficients. Significance levels: $+ p < 0.10$; $* p < 0.05$; $** p < 0.01$; $*** p < 0.001$. [b] Industry sector is a dummy variable coded as follows: Manufacturing sector firms = 1; Service sector firms = 0. [c] The F-test for the change in R^2 is computed as follows: $F_{g, N-(k+1)} = [(R^2_{UR} - R^2_R)/g]/[(1 - R^2_{UR})/(N - (k + 1))]$. Where R^2_{UR} is for the full or unrestricted model and R^2_R is for the restricted model. The F-test has degrees of freedom equals to g and $N - (k + 1)$, where g is the number of restrictions or explanatory variable dropped from the full or unrestricted model, N is the sample size, and k is the number of explanatory variables in the full or unrestricted model.

TABLE 4. Analysis of the Effects of Competitive Strategy on Firm performance (Return on Sales) [a]

Variables	Hypothesis (Expected Sign)	Model 5	Model 6a	Model 6b	Model 7	Model 8
Constant		1.441+	−1.349	−2.118*	−2.228*	−2.340*
		(0.798)	(0.903)	(1.063)	(1.117)	(1.159)
Firm size		0.592*	0.415+	0.399+	0.402+	0.432+
		(0.260)	(0.237)	(0.240)	(0.239)	(0.239)
Industry sector [b]		−0.117	0.065	−0.163	−0.267	−0.339
		(0.329)	(0.298)	(0.306)	(0.306)	(0.329)
Firm ownership		0.010	−0.064	−0.021	−0.003	−0.053
		(0.295)	(0.267)	(0.268)	(0.265)	(0.267)
Industry competition		0.472***	0.377***	0.417***	0.419***	0.445***
		(0.095)	(0.087)	(0.088)	(0.087)	(0.089)
Hypothesized Variables						
Low-cost strategy	H1 (+)		0.361***	0.448***	0.470***	0.466***
			(0.103)	(0.126)	(0.133)	(0.134)
Differentiation strategy	H2 (+)		0.362***	0.500***	0.520***	0.523***
			(0.091)	(0.115)	(0.115)	(0.118)
Low-cost strategy × Differentiation strategy			−0.236**			
			(0.081)			
Integrated Low-cost and differentiation strategies	H3 (+)			0.894**	0.952**	0.960**
				(0.362)	(0.363)	(0.364)
Moderating Effects Low-cost strategy × Industry Competition	H4 (−)				0.282*	0.310*
					(0.141)	(0.146)
Differentiation Strategy × Industry competition	H5 (+)				−0.275*	−0.288*
					(0.127)	(0.128)
Low-cost strategy × Industry sector	H6 (−)					−0.795
						(0.526)
Differentiation strategy × Industry sector	H7 (+)					0.759
						(0.515)
R^2		0.248	0.414	0.400	0.432	0.447
Change in R^2			0.166	0.152	0.032	0.015
F-test for Change in R^2 [c]			9.25***	8.28***	2.71*	1.27
Model F		8.31***	9.90***	9.34***	8.00***	6.84***

[a] The values in parentheses are standard errors of the coefficients. Significance levels: $+\ p < 0.10$; $*p < 0.05$; $**p < 0.01$; $***\ p < 0.001$. [b] Industry sector is a dummy variable coded as follows: Manufacturing sector firms = 1; Service sector firms = 0. [c] The F-test for the change in R^2 is computed as follows: $F_{g, N-(k+1)} = [(R^2_{UR} - R^2_R)/g]/[(1 - R^2_{UR})/(N - (k+1))]$. Where R^2_{UR} is for the full or unrestricted model and R^2_R is for the restricted model. The F-test has degrees of freedom equals to g and $N-(k+1)$, where g is the number of restrictions or explanatory variable dropped from the full or unrestricted model, N is the sample size, and k is the number of explanatory variables in the full or unrestricted model.

In Models 4 and 8, the interactions between low-cost and industry sector and differentiation and industry sector are added to the rest of the variables to test hypotheses 6 and 7 respectively. Hypothesis 6 states that the positive relationship between low-cost strategy and organizational performance will be stronger for service sector firms than for manufacturing sector firms. For the hypothesis to be supported, the interaction between low-cost strategy and industry sector should be negative and significant. The coefficient for the interaction term is negative but not significantly related to performance. Thus, hypothesis 6 is not supported. Hypothesis 7 states that the positive relationship between differentiation strategy and organizational performance will be

stronger for manufacturing sector firms than for service sector firms. For the hypothesis to be supported, the interaction between differentiation strategy and industry sector should be positive and significant. This hypothesis is partially supported as the coefficient of the interaction term is positive and significantly related to ROA. Furthermore, the significant coefficients in Models 1 to 3, and Models 5 to 7, maintained their significance in Models 4 and 8 respectively adding confidence to the robustness of the models.

DISCUSSION AND CONCLUSION

This study extends previous research that has examined the direct and contingent effects of competitive strategy on organizational performance by focusing on firms' responses to the implementation of economic liberalization policies. We posited that with the significant changes taking place in the local business environment in Ghana, firms implementing each of the competitive strategies of low-cost, differentiation and the integrated low-cost and differentiation will experience significant performance benefits. We also hypothesized that environmental characteristics will moderate the relationship between the competitive strategies of low-cost and differentiation, and organizational performance. Specifically, we conjectured that firms implementing the low-cost strategy will experience greater performance benefits in a lowly competitive industry, while firms implementing the differentiation strategy will experience greater performance benefits in a highly competitive industry. In addition, firms in the manufacturing industry will experience superior performance benefits by implementing a differentiation strategy, while firms in the service industry will experience superior performance benefits by implementing a low-cost strategy.

Several findings are noteworthy from the study. First, consistent with prior studies in emerging economies (e.g., Aulakh et al., 2000; Kim and Lim, 1988; Kim et al., 2004; Spanos et al., 2004) the implementation of pure low-cost and differentiation strategies were positively related to performance. Moreover, the implementation of a combination of low-cost and differentiation strategy is also positively related to performance. This is different from the results obtained by Aulakh et al. (2000) using data from Latin America. Looking back at the results in Tables 3 and 4, it could be seen that the interaction of low-cost and differentiation is not the best way of capturing the effect of an integrated low-cost and differentiation strategy on performance. The interaction of low-cost and differentiation could be influenced by firms that do not implement both low-cost and differentiation simultaneously since both variables are measured continuously. Instead, the use of a dummy variable to capture the implementation of an integrated low-cost and differentiation strategy clearly shows that it improves performance at least in the Ghanaian environment.

The findings relating to the viability and profitability of implementing the integrated low-cost and differentiation strategy may be due to the fact that in a liberalized economy like Ghana, focusing on cost minimization and operational efficiency is required to improve competitiveness in the domestic market. Moreover, with the influx of imported goods which are perceived by domestic consumers to be of superior quality, it has become imperative for domestic firms to focus on increasing the quality of products. It follows from the above arguments that becoming efficient and increasing quality are not mutually exclusive in an environment undergoing economic liberalization (Anand et al., 2006) and thus the benefits of implementing the integrated

low-cost and differentiation strategy. Our findings suggest that firms in Ghana have responded well to the changes in the business environment brought about by the economic liberalization program by implementing clearly-defined competitive strategies.

Second, although the study also found that the relationship between competitive strategy and performance is moderated by the perceived intensity of industry competition, it was contrary to our hypothesized relationships. The performance of firms implementing the low-cost strategy is enhanced in a highly competitive environment relative to those in a less competitive one. On the other hand, the performance of firms implementing the differentiation strategy is higher in a less competitive industry. These findings are consistent with Lukas et al. (1988)'s study in China's transition economy in which they found that low-cost strategy had a greater impact on performance in environments with lower levels of dynamism (lower levels of competitive intensity), while the differentiation strategy greatly impacted performance in environments with higher levels of complexity. The findings are, however, contrary to that of Miller (1988) who used data from an advanced economy. The findings imply that in economies like Ghana going through economic transformation, the effective way of competing in the highly competitive business environment created by the transformation process is by focusing on a strategy that places a premium on cost reduction and increasing efficiency. This may be due to the low income levels of the majority of the population. Thus effectively serving consumers with low incomes requires the use of cost-efficient manufacturing of mass products and the generation of profits through the reliance on high sales volumes (Meyer and Tran, 2006).

Third, we find that industry sector moderated the relationship between differentiation strategy and return on assets. Specifically, firms in the manufacturing sector that implemented the differentiation strategy performed better than firms in the service sector. Trade liberalization has led to a surge of foreign imported goods into Ghana (Institute of Statistical Social and Economic Research, 2002). Most of the imports from foreign countries are manufactured products and these products have created intense competition for lower prices and higher quality products in the domestic market. With most of the firms in the manufacturing sector of Ghana producing goods in industries considered matured in advanced countries (e.g., brewery, aluminum pans, food processing, plastics, etc.), the need to increase efficiency while also emphasizing quality is very important in making them competitive. Moreover, Ghanaian consumers generally consider most products manufactured in the local economy to be inferior to those from foreign countries. Thus, in order to eliminate these negative perceptions of "made in Ghana" products and successfully compete in the domestic market, firms in the manufacturing sector have been focusing on differentiating their products especially through quality improvement and the ability to advertise and market the products.

The findings have important implications for managers. First, adopting competitive strategic orientations of low-cost, differentiation and integrated low-cost and differentiation is not only viable, but also profitable for firms in Ghana. The viability of the integrated low-cost and differentiation strategy confirm that increasing efficiency and enhancing quality are not mutually exclusive in the Ghanaian business environment. Second, firms that are doing business in highly competitive industries would benefit by implementing a low-cost strategy as against the differentiation strategy which is profitable for those in lowly competitive industries. Third, manufacturing firms should not be bogged down with cost reduction, which obviously cannot be

discounted in Ghana, but they should place more emphasis on differentiation attributes, especially quality, to effectively compete and benefit from the new business environment created by economic transformation. Rapidly changing and intensely competitive environments require flexibility as well as the ability to reduce cost and make quality products more available to consumers.

To sound a note of caution, this study has some limitations. The first limitation is that our measure of competitive strategy is parsimonious and covered only low-cost and differentiation. Extant studies have conceptualized differentiation-based strategies along several dimensions such as marketing differentiation, innovation differentiation and quality differentiation strategies (Beal and Yasai-Ardekani, 2000; Kim and Lim, 1988; Kotha and Vadlamani, 1995; Miller, 1988; Spanos et al., 2004). However, our factor analysis results did not allow us to use the various subdimensions of the differentiation strategy. Second, we used subjective measures of performance instead of objective measures. Objective performance measures would have been preferable but as mentioned in the methods section, almost all the firms were privately-owned and objective data were not available. Even if such performance data were provided, they may suffer from inaccuracies, as such data are often not audited in privately-held organizations.

Despite these shortcomings, we believe that the study has demonstrated the importance of the direct and moderating effects of competitive strategy on organizational outcomes in an African setting. Replication and extension of our study in other African countries implementing economic liberalization will help collaborate our findings and strengthen our understanding of the direct and contingent effects of competitive strategy on organizational outcomes in African emerging economies.

REFERENCES

Abell , D. F. (1980). *Defining the Business: The Starting Point of Strategic Planning* . Englewood Cliffs , NJ : Prentice Hall .

Acquaah , M. (2005). Enterprise Ownership, Market Competition and Manufacturing Priorities in a Sub-Saharan African Emerging Economy: Evidence from Ghana . *Journal of Management and Governance* , 9 , 205 – 235 .

Anand , J. , Brenes , E. R. , Karnani , A. , and Rodriquez , A. (2006). Strategic Responses to Economic Liberalization in Emerging Economies: Lessons from Experience . *Journal of Business Research* , 59 , 365 – 371 .

Aulakh , P. S. , Kotabe , M. , and Teegen , H. (2000). Export Strategies and Performance of Firms from Emerging Economies: Evidence from Brazil, Chile, and Mexico , *Academy of Management Journal* , 43 , 342 – 361 .

Bae , J. and Lawler , J. J. (2000). Organizational and HRM Strategies in Korea: Impact on Firm Performance in an Emerging Economy , *Academy of Management Journal* , 43 , 502 – 517 .

Beal , R. M. and Yasai-Ardekani , M. (2000). Performance Implications of Aligning CEO Functional Experiences with Competitive Strategies , *Journal of Management* , 26 , 733 – 762 .

Bowman , C. and Ambrosini , V. (1997). Perceptions of Strategic Priorities, Concensus, and Firm Performance, *Journal of Management Studies* , 34, 241–258.

Dess , G. G. and Davis , P. S. (1984). Porter's (1980) Generic Strategies as Determinants of Strategic Group Memberships and Organizational Performance , *Academy of Management Journal* , 27 , 467 – 488 .

Dess , G. G. and Robinson , R. B. (1984). Measuring Organizational Performance in the Absence of Objective Measures: The Case Study of the Privately-held Firm and Conglomerate Business Unit , *Strategic Management Journal* , 5 , 265 – 273 .

Govindarajan , V. (1988). A Contingency Approach to Strategy Implementation at the Business-unit level: Integrating Administrative Mechanisms with Strategy , *Academy of Management Journal* , 31 , 828 – 853 .

Green , R. F. , Lisboa , J. , and Yasin , M. M. (1993). Porter's 1980 Generic Strategies in Portugal , *European Business Review* , 93 , 3 – 10 .

Hambrick , D. C. (1983). High Profit Strategies in Mature Capital Goods Industries: A Contingency Approach , *Academy of Management Journal* , 26 , 687 – 707 .

Hill , C. W. L. (1988). Differentiation Versus Low Cost or Differentiation and Low Cost: A Contingency Framework , *Academy of Management Review* , 13 , 401 – 412 .

Hoskisson , R. E. , Eden , L. , Lau , C. M. , and Wright , M. (2000). Strategy in Emerging Economies , *Academy of Management Journal* , 43 , 249 – 267 .

Institute of Statistical Social and Economic Research . (2002). *The State of the Ghanaian Economy in 2001* . Legon , Ghana : University of Ghana .

Jones , G. R. and Butler , J. E. (1988). Costs, Revenue, and Business-level Strategy , *Academy of Management Review* , 13 , 202 – 213 .

Karnani , A. (1984). Generic Competitive Strategies–An Analytical Approach , *Strategic Management Journal* , 5 , 367 – 380 .

Khanna , T. and Palepu , K. (2006). Emerging Giants: Building World-class Companies in Developing Countries , *Harvard Business Review* , (October) , 60 – 69 .

Khanna , T. and Palepu , K. (1997). Why Focused Strategies may be Wrong for Emerging Markets , *Harvard Business Review* , (July-August) , 41 – 51 .

Kim , L. and Lim , Y. (1988). Environment, Generic Strategies, and Performance in a Rapidly Developing Economy: A Taxonomic Approach , *Academy of Management Journal* , 31 , 802 – 827 .

Kim , E. , Nam , D. , and Stimpert , J. L. (2004). Testing the Applicability of Porter's Generic Strategies in the Digital Age: A Study of Korean Cyber Malls , *Journal of Business Strategies* , 21 , 19 – 45 .

Kotha , S. , Dunbar , R. L. M. , and Bird , A. (1995). Strategic Action Generation: A Comparison of Emphasis Placed on Generic Competitive Methods by U.S. and Japanese Managers , *Strategic Management Journal* , 16 , 75 – 83 .

Kotha , S. and Vadlamani , B. L. (1995). Assessing Generic Strategies: An Empirical Investigation of Two Competing Typologies in Discrete Manufacturing Industries , *Strategic Management Journal* , 16 , 75 – 83 .

Liff , S. , He , J. , and Steward , F. (1993). Technology Content and Competitive Advantage: Strategic Analysis in the Steel Processing and Watch Manufacturing Sectors in the People's Republic of China , *International Journal of Technology Management* , 8 , 309 – 332 .

Lukas , B. A. , Tan , J. J. , and Hult , G. T. M. (2001). Strategic Fit in Transitional Economies: The Case of China's Electronics Industry , *Journal of Management* , 27 , 409 – 429 .

Meyer , K. and Tran , Y. T. T. (2006). Market Penetration and Acquisition Strategies for Emerging Economies , *Long Range Planning* , 39 , 177 – 197 .

Mia , L. and Clarke , B. (1999). Market Competition, Management Accounting Systems and Business Unit Performance , *Management Accounting Research* , 10 , 137 – 158 .

Miles , R. E. and Snow , C. C. (1978). *Organizational Strategy, Structure, and Process* . New York : McGraw-Hill .

Miller , A. and Dess , G. G. (1993). Assessing Porter's (1980) Model in Terms of Its Generalizability, Accuracy and Simplicity , *Journal of Management Studies* , 30 , 553 – 585 .

Miller , D. (1988). Relating Porter's Business Strategies to Environment and Structure: Analysis and Performance Implications , *Academy of Management Journal* , 31 , 280 – 308 .

Miller , D. and Friesen , P. H. (1986). Porter's (1980) Generic Strategies and Performance: An Empirical Examination with American Data. Part II: Performance Implications , *Organization Studies* , 7 , 255 – 261 .

Nayyar , P. R. (1993). On the Measurement of Competitive Strategy: Evidence from a Large Multiproduct U.S. firm , *Academy of Management Journal* , 36 , 1652 – 1669 .

Nunnally , J. D. (1978). *Psychometric Theory.* , 2nd Edition . New York , NY : McGraw-Hill .

Porter M. E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors* . New York , NY : Free Press .

Porter , M. E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance* . Porter ME. 1980. Competitive Strategy . New York , NY : Free Press .

Tang , J. and Peng , M. W. (2003). Organizational Slack and Firm Performance During Economic Transitions: Two Studies from an Emerging Economy , *Strategic Management Journal* , 24 , 1249 – 1263 .

Venkatraman , N. and Ramanujam , V. (1986). Measurement of Business Performance in Strategy Research: A Comparison of Approaches , *Strategic Management Journal* , 11, 231 – 241 .

Wright , P. , Hotard , D. , Kroll , M. , Chan , P. and Tanner , J. (1990). Performance and Multiple Strategies in a Firm: Evidence from the Apparel Industry. In Dean, B. V. and Cassidy, J. C. , eds., *Strategic Management: Methods and Studies* . New York , NY : Elsevier-North Holland .

Wright , P. , Kroll , M. , Tu , H. and Helms , M. (1991). Generic Strategies and Business Performance: An Empirical Study of the Screw Machine Products Industry , *British Journal of Management* , 2 , 1 – 9 .