

The Effect of Export Marketing Capabilities on Export Performance: Moderating Role of Dysfunctional Competition

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Abstract

This study utilizes multiple-informant and time-lagged primary data from 162 industrial exporting firms in Sub-Saharan Africa to contribute to an understanding of when export marketing capabilities can be deployed to drive export performance. The study finds that market responsiveness capability drives export performance when it is deployed together with a product innovation capability. The joint effect of both capabilities on export performance is weakened at high levels of dysfunctional competition in export market environment. The findings suggest that a stronger capability to respond to export market needs and a greater competence in introducing new products in export markets are not always beneficial in Sub-Saharan African markets as the resulting export performance outcome is dependent upon degrees of dysfunctional competition.

Keywords: export marketing capabilities; export performance; dysfunctional competition; business-to-business setting; Sub-Saharan Africa

Paper type: Research paper

Introduction

The role of marketing activities and capability deployment in driving performance of industrial organizations has received substantial scholarly attention (e.g., Krasnikov & Jayachandran, 2008; Morgan, Slotegraaf, & Vorhies, 2009; Vorhies & Morgan, 2005; Weerawardena & Mavondo, 2011). Scholars within the field of export marketing research have observed that export marketing activities help boost performance (e.g., Cadogan, Kuivalainen, & Sundqvist, 2009; Diamantopoulos, Ring, Schlegelmilch, & Doberer, 2014; Lisboa, Skarmeas, & Lages, 2013; Ellis, Davies, & Wong, 2011; Ottosson & Kindström, 2016). While prior research has examined various export marketing activities (e.g., export information use and export market-oriented behavior) and their effects on export performance (e.g., Diamantopoulos et al., 2014; Chung, 2012; Souchon & Diamantopoulos, 1996), the conditions under which export marketing capabilities are more or less beneficial for industrial organizations' export market success need additional scholarly attention (Cadogan, 2012).

Most empirical studies on export marketing capabilities are based on data from developed-economy market firms (Ellis et al., 2011; Zou, Fang, & Zhao, 2003). These studies leave unanswered the question of how industrial exporting organizations in less-developed markets may benefit from deployment of export marketing capabilities. This neglect is particularly disturbing because although business transactions in less-developed markets are growing, these markets tend to experience greater heterogeneity in institutional and infrastructural functionality (Sheth, 2011), conditions that have been noted to shape the extent to which capabilities drive performance (Li & Atuahene-Gima, 2001). Thus, theoretical arguments and empirical evidence used to explain export marketing capabilities of firms operating in developed-economy markets are inadequate in explaining or predicting performance outcomes of export marketing activities of industrial organizations in less-developed markets.

In this study, we address these gaps in export marketing knowledge by examining how specific export marketing capabilities are deployed to drive export performance in less-developed

markets. Specifically, this study extends existing export literature by examining how export market-oriented responsiveness leverages product innovation capability to drive export performance in less-developed economy markets such as those in Sub-Saharan African. Export market responsiveness is defined as a firm's ability to respond to customer needs and competitor moves in its key export markets. Export product innovativeness refers to a firm's ability to introduce new products into export markets. We argue in this study that a firm's export market responsiveness (Cadogan, 2012; Chung, 2012), when aligned with product innovation activities, contributes to superior export performance. In addition, the study explores the extent to which the relationship between export marketing capabilities and export performance is conditioned by perceived dysfunctional competition. We define dysfunctional competition as managerial perceptions of impaired competitive behaviors, difficulties in avoiding patent and copyright violations, and inefficiencies in monitoring and enforcing contractual obligations in export markets. This research contributes to export literature in two ways.

First, the study draws insights from export market orientation research (Cadogan, 2012) to contend that degrees of export market responsiveness account for variations in export performance (Chung, 2012). This argument is anchored in the resource-based theory that heterogeneity in resources and capabilities among firms is fundamental in explaining firm performance (Barney, 1991). This study argues that market-oriented responsiveness focuses more on addressing export customers' articulated needs and less on latent needs (Menguc & Auh, 2006). Superior export performance is, therefore, likely to emerge when firms deploy product innovation capabilities to leverage their abilities to respond to articulated export market needs.

Second, this research provides insight into when export marketing capabilities drive export performance in developing-economy markets by examining their dependence on export market environments. The marketing literature has long assumed that functional competition is needed for competitive strategies to generate superior performance (O'Cass & Weerawardena, 2010). This assumption is based on the logic that market-supporting institutions reward compliance to, and

sanctions violation of, the rules of industry competition (North, 1990). However, functional competition is hard to come by in less-developed markets because market-supporting institutions are weak and incapable of enforcing productive competitive behaviors (Li & Atuahene-Gima, 2001). Although prior research has modelled degrees of competitive intensity as moderators of the effect of export marketing capabilities on export performance with an assumption that rival market actors play by competition rules (e.g., Cadogan et al., 2009; Zou et al., 2003), this study argues that the effect of export marketing capabilities on export performance may be weakened as levels of dysfunctional competition increase (see Figure 1).

Figure 1 here

Theoretical background and hypothesis development

A fundamental tenet of the resource-based theory is that valuable, rare, socially complex, and unique resources and capabilities help firms generate marketplace advantages (Barney, 1991), drawing attention to the notion of heterogeneity of capabilities firms deploy to drive superior performance (Barney, 1991; Wernerfelt, 1984). Against this background, export marketing scholars have argued that market-oriented responsiveness and product-innovation capabilities are idiosyncratic and socially complex organizational resources that enable firms to generate unique export market positions (Ruvio, Shoham, Vigoda-Gadot, & Schwabsky, 2014; Silva, Styles, & Lages, 2016; Zou et al., 2003). A major criticism of this resource-based theory is that it does not sufficiently explain how resources and capabilities are developed and deployed by firms to earn superior market position (Priem & Butler, 2001). Dynamic capability theorists have addressed this limitation by arguing that rather than being a function of a simple possession of resources and capabilities, superior market position is earned by purposeful configuration and deployment of resources and capabilities in a manner that fits a firm's environment (Eisenhardt & Martin, 2000; Morgan et al., 2009).

From this dynamic capability perspective, therefore, an argument is that a firm's export marketing capabilities entail complex and coordinated sets of skills and knowledge about exporting

activities that is entrenched in the firm's internal routines (Zou et al., 2003). As socially complex and idiosyncratic organizations, capabilities and activities become unique to the firms and are therefore likely to be difficult to imitate by export market rivals. As value-creating mechanisms, export marketing capabilities become a source of superior performance (Zou et al., 2003). Despite the potency of export marketing capabilities to drive export performance, an important and unresolved question is whether either market responsiveness or product innovation capability is enough to generate superior export performance. Cadogan's (2012) editorial piece argues that these capabilities might need to be aligned (or combined) for their full benefits to be realized. Other researchers have called for integrative approaches to studying how firms' customer-related and product-innovation capabilities can provide new market offerings to strengthen their ability to respond to articulated customer needs and to counteract competitive activities. For example, Menguc & Auh (2006) argue that an organizational strategy that is predicated on complementary bundling of market-response and product-innovation capabilities is a major determinant of superior performance. Additionally, Web et al. (2011) explore the question of whether there is value in innovation that brings new offerings to markets if it does not respond to market demands.

By extending these earlier studies to the export marketing in business-to-business context, this study takes a combinative approach to export marketing deployment by arguing that export performance is likely to increase when firms align export market responsiveness with product innovation capabilities.

Deployment of market responsiveness and product innovation capabilities

Researchers have argued that an ability to respond to changing needs and expectations of export market customers and a propensity to introduce new products relative to the competition is a major driver of superior export market performance (Asseraf & Shoham, 2014; Cadogan, 2012; Chung, 2012; Li & Calantone, 1998; Ottosson & Kindström, 2016). While the existing literature provides

useful insights on the benefits and challenges of deploying market response and product innovation capabilities (e.g., Leonidou, Katsikeas, & Samiee, 2002; Sundqvist, Kyläheiko, Kuivalainen, & Cadogan, 2012), the complexity of exporting requires that firms excel concurrently in several areas without trade-offs, including being highly responsive to evolving needs of export market customers and being exceptional in predicting latent market opportunities and threats for new products. This study argues that market response and product innovation activities are complementary capabilities that, if configured and deployed together, can drive superior export performance. We advance several arguments to support this assertion.

First, product innovativeness is the extent to which differentiated products attract premium market customers, enabling firms to benefit from premium pricing and industry leadership (Sundqvist et al., 2012). A firm competing on the basis of product innovativeness earns pioneering advantages including the benefits of its products being used as industry benchmarks and the luxury of grabbing loyalty from a larger market, leading to accelerated revenue generation (Srivastava & Gnyawali, 2011). Despite the lure of these benefits, with greater innovativeness comes the risk of expensive failures and disruption to existing operations (Zahra & Garvis, 2000). For example, entering an untested export market with untried products has the potential for overreaching a firm's resources. Economic returns from a new product line may take time to materialize, particularly given the diverse macro-environment of export markets. Firms within developing-economy markets may find that competitors (often neighbouring developing economies) are sharing increasingly informal and disorganized markets, many with largely subsistence consumption patterns (Sheth, 2011). For example, Mahajan's (2009) study of Sub-Saharan African markets shows that distribution networks are informal and inefficient, and therefore incapable of accommodating distribution of innovative products. Unbranded products are readily accepted in Sub-Saharan African markets and state institutions are incapable of prosecuting illegal copying of innovative products. The conventional

notion that greater product innovativeness is associated with superior performance, therefore, may not always hold in such markets.

In a developing-economy export market, product innovation capability may not offer a competitive advantage unless it is configured to respond to local market needs. Greater market responsiveness may engender structural inertia and reduce a firm's ability to be creative (Atuahene-Gima & Ko, 2001). To this end, this study proposes that a firm's commitment to respond to current and articulated needs of export market customers with well-tailored innovative products while neutralizing competing export market offerings (including rival products from both formal and informal competition) can generate superior export performance. While attention to market responsiveness may seem less risky and likely to generate a steady income stream, firms can use their innovation capabilities to develop and commercialize products that address latent needs, thereby attenuating the limitations of focusing on articulated market demands. Therefore, this study argues that the effect of market responsiveness on export performance is likely to be strengthened when levels of product innovation capability are high in magnitude. Thus, we hypothesize that:

H1: At high levels of product innovation capability, the effect of market response capability on export performance is strengthened.

Moderating effect of dysfunctional competition

This research argues that the effect of market responsiveness, in combination with product innovation, on export performance is moderated by dysfunctional competition in a firm's export market (Li & Atuahene-Gima, 2001). We propose that increased dysfunctional competitive conditions (e.g., impaired functioning of acceptable competitive behaviors, patent and copyright violations, and inefficiencies in monitoring and enforcing contractual obligations) influence the extent to which a firm's market responsiveness and product innovation capabilities are effective in achieving superior export performance (Li & Atuahene-Gima, 2001; Li & Zhang, 2007). We contend that export sales

generated from stronger responses to customer needs depend on the extent to which the competition plays by the rules of the game (Li & Atuahene-Gima, 2001). When competition becomes increasingly dysfunctional, firms may not earn the expected sales values from satisfied customers in the sense that the cost of dealing with such dysfunctions may undercut sales that firms generate from their marketing activities. In addition, a weak appropriability regime and opportunistic competitive behavior in export markets can have a negative effect on export sales when differentiation values attributed to new product introductions are reduced by dysfunctional competitive activities.

Although researchers have maintained that high levels of market responsiveness may not be ideal in benign export market environments (Cadogan et al., 2009; Chung, 2012), this conclusion is based on the assumption that market actors follow acceptable market norms. This study argues against this established assumption, in the sense that competition tends to be uneven, incentives to engage in unfair competitive practices are high, and the motivation for unlawful competitive behaviors is commonplace in less developed markets (Mahajan, 2009; Sheth, 2011). To the extent that traditional market-oriented principle that timely responses to market demands are warranted in highly competitive environment might not suffice in increasingly dysfunctional environments. Additionally, greater product innovativeness may not pay off because new products introduced in dysfunctional competitive markets are likely to be counterfeited, and generic market response strategies might not pay off because consumers in such markets consume largely on a subsistence basis and have a good incentive to purchase unbranded products, effectively undermining the differentiation arguments of greater innovativeness (Sheth, 2011). Therefore, this study argues that:

H2: At higher levels of dysfunctional competition, the joint effect of market responsiveness and product innovation capabilities on export performance is weakened.

Data and Methods

We tested our hypotheses on a sample of small and medium-sized enterprises (SMEs) exporting industrial products from Ghana to other developing markets (predominantly Sub-Saharan African and Asian markets). The sampling frame used was a directory of exporters provided by the *Ghana Export Promotion Authority*, a national registry of exporters in that country. To supplement this list, we also used the *Ghana Business directory*, which had been used in previous studies (e.g. Acquah, 2007). From a sampling frame of 4,965 we randomly selected 750 firms that met the following criteria: (1) the firms were independent entities and not part of any company group or chain; (2) the firms had an international focus, earning a significant percentage of annual sales from export operations; (3) the firms employed a minimum of five and a maximum of 250 full-time staff; and (4) there was complete contact information on the senior managers who would have substantial knowledge of the firms' export operations (Wiklund & Shepherd, 2011).

A local branch of an international research consultancy firm was hired to administer the questionnaires, supervised by one member of the research team with extensive knowledge of Ghana. This in-person questionnaire delivery procedure confirmed that respondents' met the study criteria, thereby assuring useable responses (Li, Zhao, Tan, & Liu, 2008). A post hoc informant quality test was used to ensure respondents were competent to complete the questionnaires (Morgan, Kaleka, & Katsikeas, 2004).

Two separate studies were undertaken. In the first study (2012), we contacted all 750 firms and obtained agreements to participate from 332 CEOs. From this cohort 66 useable responses were obtained, representing a 22% response rate. A mean score of 6.58 (std. = 0.58) was recorded for knowledge of issues, 6.46 (std. = 0.52) for accuracy of responses, and 6.66 (std. = 0.56) for confidence in answers. In the second and third studies (i.e. 2013 and 2014 respectively), questionnaires related to the firms' export sales performances were administered to the finance managers or chief accountants of the 166 firms that participated in the 2012 study using the same interviewers and in-person procedure. A total of 162 firms (97.6%) provided complete responses to the export sales

performance questionnaire. Accordingly, we relied on the matched sample of 162 firms for our analyses¹.

We allowed a one-year lag between the predictor export marketing capability variables and export performance outcome variable to safeguard against social desirability and potential reverse causality difficulties, and boost our ability to make causal inferences (Wiklund & Shepherd, 2011). We relied on finance managers in the 2013 and 2014 studies to eliminate common method bias concerns (Podsakoff, P. M., MacKenzie, Jeong-Yeon, & Podsakoff, N. P., 2003). Similar scores on the respondent competence scale items were obtained from the finance managers and accountants: the lowest mean score was 6.1. To corroborate the data from the in-person surveys, follow-up telephone calls were made to 10 percent of the 162 CEOs/export managers and 10 percent of the finance managers/chief accountants to re-ask the questions. The results showed no significant differences in the responses provided in the two surveys.

The companies we studied export a variety of products: pharmaceuticals, alcoholic and non-alcoholic beverages, packing materials, industrial pipes, textiles and garments (designer apparel), processed foods, and industrial equipment. As one would expect, firms located in Sub-Saharan Africa (as in other regions) tend to internationalize by first exporting to neighbouring markets before venturing further afield (although we are aware of the born-global phenomenon). The firms in our sample exported largely to other African markets (>90%), China (5%), Turkey (3%), and other markets (2%), generating more than 70% of their annual sales from these export markets.

Measures

The observed indicators used in the study were adapted from previous studies by making changes to words and sentences that enhanced understanding in international business-to-business and exporting business contexts. All constructs examined in this study are at the firm level (Cadogan et al., 2009).

¹ Note that a firm was excluded from the study when a finance manager or a chief accountant could not be identified or the CEO was also the finance manager or accountant.

Respondents were asked to focus on their firms' overall export market operations when responding to the survey instruments (see Table 1).

Market responsiveness capability was operationalized as a firm's ability to respond to customer needs and competitor activities in its key export markets (Chung, 2012). Items measuring the export market responsiveness construct were adapted from Cadogan et al.'s (2009) market-oriented responsiveness scale. *Product innovation capability* was operationalized as a firm's ability to introduce new products to its export markets, measured at the firm level (e.g. Boso, Story, Cadogan, Micevski, & Kadic-Maglajlic, 2013). The items measuring the product innovativeness construct were taken from Boso et al.'s (2013) firm-level product innovativeness scale. *Dysfunctional competition* is operationalized as the degree of managerial perception of the extent to which principal export markets had experienced the following conditions: (1) unlawful competitive practices such as illegal copying of new products, (2) counterfeiting of products and trademarks, (3) ineffective laws to protect company intellectual property, and (4) increased unfair competitive practices by other firms. The indicators were adapted from Li and Atuahene-Gima (2001) and Li and Zhang (2007).

Export performance was measured with objective export sales data (Leonidou et al., 2002). The sales data was obtained from internal account records provided by the finance managers; such records are unavailable externally in developing economies such as Ghana. We asked finance managers to provide information on the firms' overall export sales from their most important emerging markets. We focused on the firms' export sales for several reasons. First, measures of SMEs' export performance can be elusive. Such performance can be measured by efficiency (e.g., return on assets), profitability (e.g., net profit margin), growth (e.g., change in revenue), and other factors (e.g., size, liquidity, leverageability, employee turnover) (Murphy, Trailer, & Hill 1996). Second, sales (or revenue) and its rate of increase has been cited as the most common indicator of company performance (Naldi & Davidsson, 2014). Murphy et al. (1996) point out that 23 scholarly papers have used sales increase as a measure of SME performance relative to only two studies that

have used net profit. Third, for small business owners, data on efficiency indicators such as return on assets are often not available and profitability indicators are unreliable due to taxation issues. SME scholars have argued that, “revenues are not only a relatively ‘clean’ number from an accounting perspective [...] but also are a meaningful performance measure because the achievement of sales signals that a firm [...] was successful in attracting customers and, more generally, in meeting market demand with its offerings” (Dencker & Gruber, 2015, p. 1042). For small businesses involved in business-to-business operations in export markets, export sales revenue is an important indicator of the firms’ viability (Dobbs & Hamilton, 2007). Accordingly, we used the average of the firms’ 2013 and 2014 total export sales revenue to capture our export performance construct. To validate the objective export sales data, we also obtained perceptual export sales data from the firms’ finance managers (the same source of the objective sales data). The perceptual export performance scale captured the extent to which the firms’ export sales indicators (i.e., market share growth, sales volume, and sales growth) met the firms’ export market objectives. We then calculated the correlation between the objective sales data and the average score of the perceptual performance indicators. A significant correlation was observed: ($r = .76; p < .01$).

To avoid potential confounds, we controlled for these potential influences: presence of formal export departments (0=yes; 1=no), industry type (manufacturing=0, services=1), firm size (a logarithm transformation of the number of full-time employees), export experience (a logarithm transformation of the number of years doing business abroad), export market competitive intensity (three items were adapted from Jambulingam, Kathuria, & Doucette, [2005]), multinationality (the number of countries to which products have been exported), and human resource capacity (the level of skills, expertise, and knowledge embodied by export personnel [adapted from Subramaniam and Youndt’s (2005) ‘human capital’ scale]).

Analyses

Measurement model assessment

All the multi-item scales were assessed in confirmatory factor analysis (CFA) using the LISREL 8.7 package and maximum likelihood estimate method. The results presented in Table 1 show an excellent fit for the CFA model, returning a non-significant Chi-square value ($p < .05$), and with all fit heuristics falling within recommended criteria: the ratio of chi-square to degrees of freedom is 1.08, RMSEA = .02, NNFI = .95, and CFI = .95. Additionally, the factor loadings for all items are significant ($p < .01$), and the Composite Reliability (CR) and Average Variance Extracted (AVE) values for each latent construct are greater than .70 and .50, respectively (Bagozzi & Yi, 2012).

Table 2 presents summaries of descriptive statistics and inter-construct correlations for each construct studied, all of which have sufficient construct reliability (as shown by their respective CR values), and discriminant validity (as AVE values for each multi-item construct are larger than the squared correlation between any pair of constructs; and as cross-loadings and correlated error terms are absent from the CFA model (Bagozzi & Yi, 2012) (see Table 1). Thus, we are confident that our measures are valid for theory testing purposes.

Table 1 and Table 2 about here

Although our dependent variable came from a source different from the independent variables and multiple time points, we checked for a possible influence of common method bias (Podsakoff et al., 2003). We estimated three competing bias models: Method 1 involved estimation of a method-only model in which all indicators were loaded on a single latent factor. The fit indexes (i.e., Chi-square (χ^2) = 4,909.481; $df = 779$; RMSEA = .159; NNFI = .33; CFI = .36) produced a poor-fitting model. Method 2 was a trait-only model in which each indicator was loaded on its respective latent factor. The results showed excellent model fit: $\chi^2 (df) = 832.16 (769)$; RMSEA = .022; NNFI = .95; CFI = .95. In method 3, a method and trait model was estimated involving inclusion of a common

factor linking all the indicators in model 2. Results show a non-significant improvement in model fit: χ^2 (df) = 832.15 (754); RMSEA = 0.025; NNFI = .94; CFI = .95. Comparison of the three models indicates that model 2 and model 3 are superior to model 1, and that model 3 is not substantially better than model 2. This shows that no single factor accounts for most of the variance in the measures, suggesting that common method bias was not a problem in our analysis (Podsakoff et al., 2003).

Hypothesis Testing and Findings

To test our hypotheses, several multiplicative interactions were created. To attenuate for multicollinearity problems due to our use of product terms, all variables involved in multiplicative interactions were mean-centered using the procedure recommended by Aiken and West (1991). Subsequently, we followed hierarchical moderated regression analysis procedures to test our hypotheses. In total, five regression models were estimated and compared (see Table 3). None of the regression equations has multicollinearity problems: the largest variance inflation factor (VIF) is 1.34, which is well within the recommended limit of 5.00.

In baseline Model 1, only the control variables were modelled on the export sales performance dependent variable. In Model 2, the direct effect of dysfunctional competition was included. The direct effect of market responsiveness and product innovativeness were added in Model 3. The two-way interaction terms (e.g., market responsiveness x product innovation) were added in Model 4. In Model 5 the three-way interaction term for market responsiveness, product innovativeness, and dysfunctional competition was added to the analysis. From Table 3, it can be seen that changes in the R^2 values are significant ($p < .05$) for all models; however, Model 5 (the most comprehensive, with all variables included) produced the largest R^2 value of 41 per cent. Hence, we rely on Model 5 to interpret the hypotheses.

An interesting finding is that increases in market responsiveness are associated with increases in export performance ($\beta = .39$; $t = 6.23$; $p < .01$), and high levels of product innovativeness are associated with increases in export performance ($\beta = .24$; $t = 3.55$; $p < .01$). Interestingly, increases in

dysfunctional competition do not change variability in the firms' export performance ($\beta = .12$; $t = 1.62$; $p > .05$). The study argues in H1 that high levels of product innovativeness strengthen the effect of market response capability on export performance, and this is supported in the data ($\beta = .14$; $t = 1.98$; $p < .05$). The study asserts in H₂ that the joint effect of market responsiveness and product innovation capabilities on export performance is weakened (i.e., becomes negative) when levels of dysfunctional competition increase. We find support for this hypothesis at 5% significant level ($\beta = -.15$; $t = -2.01$; $p < .05$).

Additional analyses

A number of additional analyses were undertaken to further explore our findings. First, for a better understanding of moderating effect relationships, we plotted the interactions in Figure 2 and Figure 3 following the recommendations of Aiken and West (1991). As shown in Figure 2, when product innovativeness takes on values above its mean values, an increase in market responsiveness is associated with a greater increase in levels of export performance. Figure 3 shows that at higher levels of dysfunctional competition, the joint effect of product innovation strategy and market response strategy on export performance is weakened.

Table 3 about here

Figure 2 and Figure 3 about here

Discussions and conclusion

This study developed and tested a model that depicted the joint effect of market responsiveness and product innovativeness, and the moderating effects of dysfunctional competition on export performance in the developing economy of Ghana, Sub-Saharan African. Findings indicate that the joint effect of market responsiveness and product innovativeness on export performance is positive, however, this positive effect is weakened (and become negative) when levels of dysfunctional

competition increase in magnitude. The conclusions identify implications for industrial export marketing research and practice.

Theoretical implications

Export marketing research has examined two features of exporting firms market-oriented activities that drive performance: market response (Cadogan et al., 2009; Chung, 2012) and innovation (Ruvio et al., 2014; Silva et al., 2016; Sundqvist et al., 2012;). Findings from this study reveal that market responsiveness and product innovation capabilities drive superior export performance when deployed individually, but when they are deployed jointly the alignment provides industrial exporters a greater capability to boost export market performance. These findings are, therefore, validation for calls on researchers to explore complementarity between multiple export marketing capabilities (e.g. Cadogan, 2012; Menguc & Auh, 2006; Webb, Ireland, Hitt, Kistruck, & Tihanyi, 2011), and build on extant studies that advocate for the notion that developing-economy firms should develop and deploy a dynamic configuration of internally- and externally-focused capabilities to enhance performance (Lau & Bruton, 2011). Within the context of this study, product innovativeness may be construed as an internally-focused capability of firms to develop and commercialize innovative products (Naidoo, 2010; O'Cass & Ngo, 2011). Export market responsiveness constitutes a firm's externally-focused capability. Thus, while product innovativeness may or may not be a useful strategic approach in developing-economy markets such as sub-Saharan Africa, its value to firms is predicated on using it being used to deploy market responsiveness capability to contribute to performance.

Export marketing research has also included consideration of the extent to which the efficacy of export marketing activities in driving export performance is moderated by degrees of competitive intensity and dynamism in export markets (e.g., Cadogan et al., 2009; Zou et al., 2003). In a departure from existing approaches to modelling the competitive environment, this study explored the notion of dysfunctional competition as a moderator of the joint effect of market responsiveness and product innovation capabilities on export performance. Results show that variability in dysfunctional

competition in a firm's export markets does not change a firm's export performance. However, under increasing levels of dysfunctional competition the export performance benefits that accrue to a firm from its market responsiveness and product innovation capabilities are significantly curtailed. This finding confirms a long-held belief among international businesses operating in Sub-Saharan Africa that the dysfunctionality of this market tends to work against conventional approaches to satisfying customer needs (Sheth, 2011). Under high levels of dysfunctional competitive environment condition, increasing transaction costs of product innovations may exceed gains in export sales (Li & Zhang, 2007; Sheth, 2011). This study submits, therefore, that under dysfunctional competitive conditions investments in marketing capabilities may not result in the desired returns. Examples of this outcome include Cadbury and Coca-Cola who were forced to close factories in Kenya, and Shoprite Holdings, a South African retailer, to scale back its original plan to open 600 to 800 stores in Nigeria to only 12 stores in 2014 (The Economist, 2015). In sum, the evidence from this study suggests that while product innovation may help boost a firm's ability to respond to local market needs in Sub-Saharan Africa, increasing levels of dysfunctional competition in this market have the capacity to deplete a firm's export performance. This challenge raises several managerial and public policy implications.

Managerial and public-policy implications

Managers of developing-economy exporting firms may have success with developing and commercializing innovative products in response to articulated needs in other developing-economy local markets. Findings from this study show that exporters in Ghana increased their export revenue by aligning their product innovation and market response strategies. The implication, therefore, for managers in sub-Saharan Africa is that success as measured by export revenue generation is predicated on ensuring that product innovation capabilities are used to leverage a firm's ability to address unique demands and consumption patterns in these developing-economy markets (Mahajan, 2009).

Additionally, dysfunctional market conditions have historically discouraged international investors out of concern over potential adverse effect on returns (Li & Atuahene-Gima, 2011). This concern among business leaders is confirmed in this study which finds that although exporters do not directly suffer from the dysfunctional competitive condition in their export markets (perhaps due to the firms' competitive advantage of handling similar adverse conditions within their home markets), increases in dysfunctional competition ultimately weaken the benefits that derive from their export marketing capabilities. In view of this, we suggest that exporting managers have a responsibility to ensure that when faced with dysfunctional competition in their export markets, market responsiveness and product innovation strategies should be adjusted to minimize adverse consequences on sales revenue. Firms doing business in Sub-Saharan African markets need to rethink their overall marketing strategy by taking into account the reality that consumer spending power is low and new product consumption patterns are fragmented. Firms also need to be aware that marketing channels are in flux and heavily controlled by vested interest groups (Martel & Klibi, 2016). Informal social networks are the conduit through which marketing communication messages are delivered to consumers (Acquaah, 2007), thereby denying firms conventional market-based competitive approaches to marketing new products. A key success factor for firms exporting to this market, therefore, is an ability to respond rapidly to unexpected market changes with new product offerings that provide simple solutions to daily consumer needs.

To this end, we suggest that non-traditional approaches to innovation (e.g., dramatically reducing costs by developing products that are affordable and accessible to larger consumer groups) and innovative access to customers are major drivers of success in Sub-Saharan African markets (Sheth, 2011). Some firms in Sub-Sahara African markets are forming informal alliances with local vendors and local governmental and non-governmental agencies to increase consumer adoption of new products, thereby reducing the adverse effects of dysfunctional competitive activities on their performance (Spivey, Woods, Lamiaux, & Hill, 2014).

Public policy makers working to create business-friendly environments in Sub-Saharan African markets can gain foreign investors' confidence by providing a fair opportunity for investors to extract economic value for their investments. This can be done by assuring investors of firms' observance of functional competition regulations. A major implication, therefore, is that strengthening business-supporting institutions such as commercial courts and industry promotion and regulatory bodies (e.g., Ghana Export Promotion Authority and Ghana Investment Promotion Centre), and enforcing existing laws that govern industry behaviors can help reinforce investor confidence in Sub-Saharan African markets.

Study limitations and direction for further research

Although this study expands knowledge on export marketing in business-to-business contexts, the results should be taken as tentative for a variety of reasons. First, one may argue that although exporting is the most popular mode of internationalization among small businesses in developing economies, small businesses that use other modes of international operation (e.g., joint ventures and foreign direct investment) could form a unique cluster and context for future research. The nature of these alternative modes of international operation may be substantially different from the exporting mode explored in the current study.

Also, we acknowledge that this is a single-country study, conducted in a relatively small Sub-Saharan African economy that is under-going significant political, economic, social, and technological transformations. While the transitions which are sweeping through many African markets are similar (Acquaah, 2007), the pace of such transformations are diverse and the size of these markets vary, providing different degrees of opportunity and challenge to firms. A fruitful avenue for future research, therefore, may be to examine the extent to which export marketing capabilities are further conditioned by degrees of marketization and size of firms' host and home markets.

Third, the channel through which export marketing capabilities influence export performance is the subject of future research. For example, one may argue that marketing program execution

effectiveness (e.g., adaptation versus standardization) may mediate the effect of market response and product innovation activities on export performance: that is, the extent to which market responsiveness and product innovativeness are successful may be via their effects on degree of adaptation or standardization of marketing programs and fit to the exigencies of particular export markets.

Fourth, exporting businesses may take on strategic marketing approaches (e.g., technology-oriented or institutional networking-oriented approach) beyond the two capabilities examined in this study. We suggest that future research should examine how other firm capabilities may interact with marketing capabilities to drive export performance.

Fifth, it seems that multinationality may be interacting with the main-effect variables examined in this study. This raises an important question of how a propensity to engage in business-to-business operations affects developing-market firms that advance innovation capabilities to respond to multiple export market needs. We suggest that future research might draw insights from international experiential learning literature to explore this research question.

Finally, while this study followed previous studies to capture dysfunctional competition with perceptual measures (e.g., Li and Zhang, 2007), an alternative approach to measuring the dysfunctional competition construct may be to use an index, such as a target country's Corruption Perceptions Index from Transparency International to calculate their distance from a firm's home². In fact, this alternative approach may help validate the existing perceptual measure of the dysfunctional competition construct.

² We thank an anonymous reviewer for making this useful suggestion to us.

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Table 1: Details of measures, standardized factor loadings, reliability tests, and fit statistics

Item description	Standardized factor loadings	CR	AVE			
Product innovation intensity (adapted from Boso et al., 2013) <i>1 = not at all; 7 = to an extreme extent</i>		.91	.77			
-Our business has produced more new products/services for our emerging markets than our key emerging market competitors.	.89					
-On average, each year we introduce more new products /services in our emerging markets than our key emerging market competitors.	.88					
-Industry experts would say that we are more prolific when it comes to introducing new products/services in our emerging markets.	.87					
Product innovativeness novelty (Boso et al., 2013) <i>1 =less than; 7 = more than</i>		.89	.74			
Relative to our main emerging market competitors, the products/services we offer in our emerging market(s) are:						
-Revolutionary.	.86					
-Inventive.	.78					
-Novel.	.91					
Market responsiveness (adapted from Chung, 2012; Cadogan et al., 2009) <i>1 = strongly disagree; 7 = strongly agree</i>		.81	.59			
-In our emerging market operations, we are quick to respond to the local needs of our customers.	.70					
-In our emerging market operations, we rapidly respond to local market conditions by adapting our market offerings (e.g., product design, prices, and distribution).	.81					
-In our emerging market operations, if a major competitor were to launch an intensive campaign targeted at our customers, we would implement a response immediately.	.80					
Human resource capacity (adapted from Subramaniam & Youndt, 2005) <i>1 = strongly disagree; 7 = strongly agree</i>		.89	.66			
-Our employees are highly skilled in emerging market operations.	.66					
-Personnel in our company are widely considered the best in our industry.	.80					
-Personnel in our company are creative and bright.	.78					
-Our employees are experts in their particular emerging market roles and functions.	.90					
-Our employees develop new ideas and knowledge for our emerging markets.	.88					
Dysfunctional competition (adapted from Li and Atuahene-Gima, 2001; Li and Zhang, 2007) <i>1 = not at all; 7 = to an extreme extent</i>		.85	.58			
-Unlawful competitive practices such as illegal copying of new products are common in our emerging markets.	.66					
-Counterfeiting of our products and trademarks by other firms is widespread in our emerging markets.	.79					
-Ineffective market competition laws to protect our company's intellectual property are prevalent in our emerging markets.	.85					
- In our emerging markets, the selling of unbranded products by other firms is an accepted practice.	.77					
Export market competitive Intensity (adapted from Jambulingam et al., 2005)		.71	.52			
-There is substantial competition among firms in our emerging markets.	.74					
-Our emerging markets are noted for competition between firms.	.74					
-Competition in our targeted emerging markets is cut-throat.	.88					
Perceptual export performance (taken from Cadogan et al., 2009)# <i>1 = worse; 7 = better</i>		.91	.76			
Compared to your emerging market competitors, how well has your business performed?						
- market share growth	.82					
- sales volume	.96					
- sales growth	.81					
Goodness of Fit Statistics						
χ^2 (d.f.)	χ^2 /d.f.	p-value	RMSEA	NNFI	CFI	IFI
832.16 (769)	1.08	.06 ^a	.022	.95	.95	.96

Note: R = Reversed coded item; CR = Construct Reliability; AVE = Average Variance Extracted; a = Not significant at 5%.

= this was used to validate the objective export sales data and for robustness tests

Table 2: Descriptive statistics and inter-construct correlation

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Export Function‡	-	-												
2. Industry Type‡	-	-	-.01											
3. Firm Size#	233.34	147.21	-.07	.23										
4. Exporting Experience#	41.18	29.53	.07	-.04	.11									
5. Multinationality#	43.92	16.28	.03	-.03	.01	-.02								
6. Competitive Intensity	4.02	1.315	-.03	-.08	.09	-.09	.08							
7. Human Resource Capacity	4.47	1.210	-.05	-.03	.12	-.09	-.17	.16						
8. Market Responsiveness	4.63	1.043	-.11	-.01	.08	-.08	.05	.24	.16					
9. Product Innovativeness	4.62	.99	-.03	-.04	.04	-.01	-.40	.05	.25	.10				
10. Dysfunctional Competition	4.83	1.21	-.06	.15	.00	.01	-.02	.25	.14	.31	.06			
11. Perceptual export sales performance	4.59	1.08	-.08	-.06	.11	-.06	.03	.25	.26	.51	.26	.31		
12. Export sales (in ,0000 US \$)#	88.02	104.21	-.06	-.05	.12	-.05	.02	.24	.25	.47	.22	.27	.76	

Note: N = 162; * $p < 0.05$; ** $p < 0.01$ (2-tailed test); SD: Standard Deviation; ‡ = Dummy Variable; # = Natural logarithm transformation was taken; correlations .15 and above are significant at 5%.

Table 3: Results of hierarchical moderated regression analysis

Predictor variables (T₁)	Dependent variable: Export performance (T₂)				
	Model 1	Model 2	Model 3	Model 4	Model 5
<u>Control effect paths</u>					
Export Department	-0.08 (-1.01)	-.071 (-.94)	-.06 (-.75)	-.04 (-.58)	-.07 (-.95)
Industry Type	-0.01 (-.14)	.020 (.26)	.06 (.77)	.05 (.60)	.07 (.96)
Firm Size	0.02 (.24)	.008 (.10)	.02 (.25)	-.00 (-.01)	.02 (.32)
Export Experience	-0.07 (-.86)	-.08 (-1.04)	-.08 (-1.13)	-.08 (-1.04)	-.09 (-1.24)
Multinationality	.06 (.82)	.06 (.94)	.12† (1.91)	.16* (2.24)	.17* (2.26)
Competitive Intensity	0.13* (1.69)	.10 (1.33)	.06 (.80)	.07 (.88)	.02 (.21)
Human Resource Capacity	.20** (2.87)	.19** (2.85)	.11† (1.75)	.12* (2.05)	.13* (2.13)
<u>Direct effect paths</u>					
Dysfunctional Competition (DC)		.15† (1.73)	.14† (1.79)	.12† (1.89)	.12 (1.62)
Market Responsiveness (MR)			.41** (6.71)	.40** (6.47)	.39** (6.23)
Product Innovativeness (IN)			.23** (3.65)	.20** (3.06)	.24** (3.55)
<u>Two-way interaction effect paths</u>					
INxDC				-.13* (-1.99)	-.14† (-2.16)
MRxDC				-.02 (-.35)	-.04 (-.59)
H ₁ : INxMR				.15* (2.28)	.14* (1.98)
<u>Three-way interaction effect path</u>					
H ₃ : INxMRxDC					-.15* (-2.01)
F-value	4.79**	5.80**	12.04**	9.94**	9.66**
R ²	.14	.19	.38	.40	.41
Adj. R ²	.11	.15	.34	.36	.37
ΔR ²	--	.05**	.19**	.02**	.01**
F-value of ΔR ²	--	14.06**	30.31**	2.20*	4.03**

Note: † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$ (2-tailed test); α = critical t-values are 1.65, 1.96 and 2.33 respectively; Standardized coefficients are reported (t-values in parentheses).

Figure 1: Conceptual framework and hypotheses

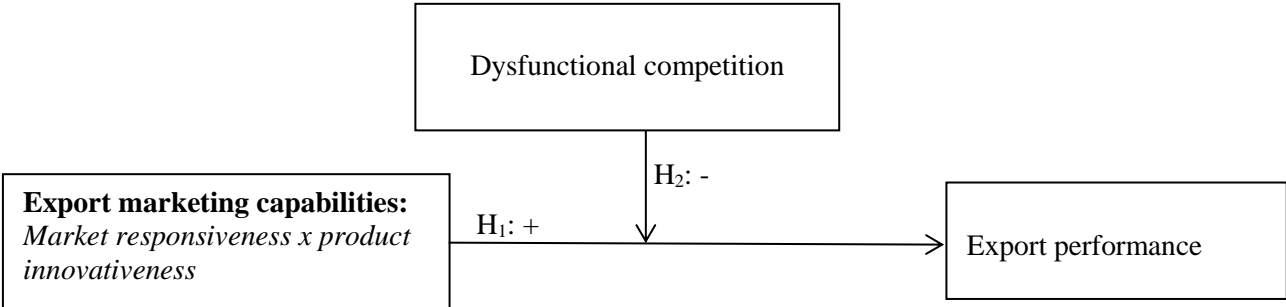


Figure 2: Interactive effect of export market responsiveness and product innovativeness on export performance

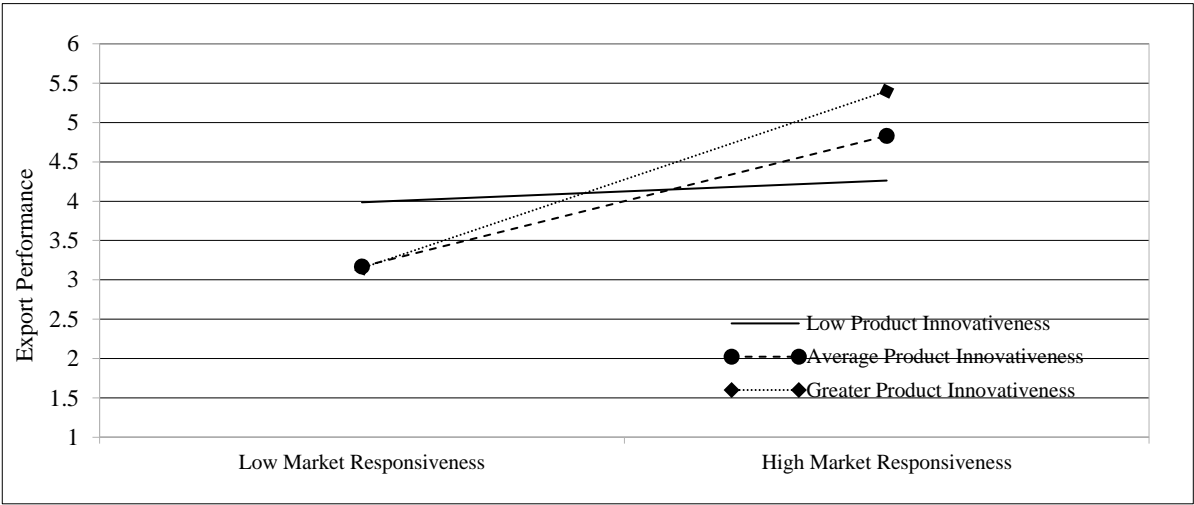


Figure 3: Interactive effect of export market responsiveness and product innovativeness and dysfunctional competition on export performance

