Moderation Effects on the Market Orientation-Performance Connubial Relationship: A Developing World Perspective

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Abstract

Market orientation (MO) occupies the front burner in strategic marketing domain. To date, available empirical evidence on the universality and effect of MO on organisational performance continue to generate mixed, conflicting, contradictory, inconsistent and at best inconclusive research findings. Thus, the study investigates the MO-objective performance measure relationship and the effects of moderation variables in Nigeria. A survey approach was used and the Narver and Slater's (1990) MKTOR scale was adapted to the Nigerian business environment and adopted for the study. Results show that contrary to prior research MO has a direct relationship with profitability and market share. Amazingly, market turbulence does not moderate the relationship, competitive intensity was found to play a moderating role in the MO-profitability relations but no effect on MO-market share relations. Technological turbulence was found to negatively moderate the MO-profitability link but not for market share. It thus, suggests that the Nigerian business has some resemblance with advanced countries. This may be due largely to western influence in the country, which leads to changing customer lifestyle and business landscape.

Key words: Market orientation, objective performance, moderating variables, Nigeria.

1. Introduction

With a population of over 170 million people, Nigeria was already a good candidate for the attraction of foreign direct investments (FDI) on the continent. After re-basing her gross domestic product (GDP) in 2013, the country arrived at the global stage as the largest economy (in terms of both GDP and in population) in Africa and twenty sixth globally (World bank, 2013). Prior and post GDP re-basing, huge foreign direct investments poured into and continue to favour Nigeria in form of green field investments, joint-ventures or wholly-owned subsidiaries (UNCTAD, 2013). Despite the attractiveness of the country, the composition, changes and structure of its economic and political landscape raise severe challenges to foreign firms rearing to explore the enormous potentials of this emerging market. Thus, the need for a strategic marketing tool to provide succour to interested global firms. Market orientation (MO) adopted widely in most western and some developing/emerging economies suffices (Ellis, 2006; Liu, Luo and Shi, 2003).
Market orientation is theorised as the implementation of the marketing concept (Liao, et al., 2011). A multiplicity of studies on the MO construct and MO-performance relations abound. Interestingly, a group of research echo loud strong empirical support for the positive effect of MO on performance (Gaur, Vasudevan and Gaur, 2011; Hau, Evangelista and Thuy, 2013), others found no relationship (Bhuian, 1997; Harris, 2001). While, yet another stream of researchers contend on the non-direct effect of MO on performance, rather, the link is moderated by certain environmental factors. However, the role of the environment in the MO-performance relations continues to divide MO researchers. For example, Kumar, Subramanian and Yauger (1998), Pulendran,Speed and Widing (2000) found support for the moderating role of market turbulence, Grewal and Tansujah (2001) competitive intensity, Rose and Shoham (2002) technological turbulence. Amazingly, a fourth group found no support whatsoever ((Slater and Narver, 1994; Kirca, Jayachandran and Bearden, 2005). These conflicting study findings to date could be due to culture and differences in the stages of economic development amongst countries studied (Appiah-Adu, 1998, Ellis, 2006), which underpin this present study. In addition, the influx of foreign firms into Nigeria requires that adequate knowledge of the roles of these environmental factors be sacrosanct. The contextual differences between Nigeria and the western world suggest the powerful and changing roles of business environmental forces imperative to both local Nigerian and foreign firms already in and others looking to do business in the country. Ignorance of these factors may portend some level of risk and the firm's peril. Consequently, this paper/study circumscribes MO, moderating variables and their impact on the MO-objective performance relations in this fast developing and growing country, Nigeria. The need to test objective measures of performance is consistent with the negative MO-performance effects reported in extant literature (Tse, 1998; Dawes, 2000). The country is relevant as it shares nomological similarities with other developing countries, thus, a true representation of these investment destinations and gateway to those countries.

2. Conceptualisation and Hypotheses

2.1 Market orientation

Several conceptualisations of the MO body of knowledge exist. Kohli and Jaworski (1990) posit an information-processing and capabilities-based perspective, which is based on a set of three of behavioural activities; including: (1) organisation-wide generation of market intelligence pertaining to current and future customer needs (2) dissemination of the intelligence across units and (3) organisation-wide responsiveness to it. In contrast, Narver and Slater (1990, p.20) take the more nuanced organisational culture perspective, and state that MO is "as an organisation culture that most effectively and efficiently creates the necessary behaviours for the creation of superior value for buyers and thus, continuous superior performance for the business". Consistent with this model of MO, the construct consists of three dimensions viz; (a) customer orientation, (b) competitor orientation and (c) inter-functional co-ordination. Hence, MO is viewed as a strategic marketing tool needed to foster higher levels of firm performance (Wang and Chung, 2013).

Customer orientation is defined by the rich knowledge of the customer's current and future needs. It connotes adequate focus on customers by comprehending, identifying, analyzing and responding to their needs, expectations and demands, and, creating, generating and enhancing their satisfaction, reliability and acceptance (Ussahawanitchakit, 2007). Competitor orientation
entails the effective monitoring, collective understanding of the short-term strengths and weaknesses and long-term capabilities and strategies of both the key current and the key potential competitors (Narver and Slater, 1990). Whilst, inter-functional co-ordination comprises organisation-wide concerted effort geared toward the co-ordinated utilisation of the firm’s resources in creating superior value for the target and potential customers (Narver and Slater, 1990).

2.2 Market orientation and Organisational performance

The relationship between MO and organisational performance occupies the front burner of the MO literature and is noted as the cornerstone of this marketing domain (Mavondo, Chimhanzi and Stewart, 2005). The argument on the potency of MO in enhancing firm overall performance is well documented in the literature and consistent with figure 1 above. Although Narver and Slater (1990) and Kohli and Jarworski (1990) reported positive MO-performance link, available and recent streams of research have produced a constellation of highly mixed; conflicting, contradictory, inconsistent and at best inclusive research findings to date (Noble et al., 2001, Gonzalez-Benito and Gonzalez-Benito, 2005). The first set of research stream argues on the performance measure- objective and subjective measures. Kumar, et al. (2011) note that MO-performance link is strong and positive with subjective measures, however, when objective measures are included, evidence of the effect tend to be lacking (Haugland, Myrtevit and Nygaard (2007). We hypothesize that:

**H1: There is a relationship between MO and profitability (objective measure of the firms' performance).**

**H2: There is a relationship between MO and market share (objective measure of the firms' performance).**
2.2 **Moderation effects of market turbulence**

Changes in tastes and preferences of consumers and the composition of an entire market are referred to as market turbulence. When the members of a market demonstrate stable preferences, we expect MO to have very negligible effect on performance. Thus, manipulation of the marketing mix elements might be sufficient to meet the needs of this market (Kohli and Jaworski, 1990; Ellis, 2006). However, when these preferences evolve continuously, the impact of MO might become more pronounced (Jaworski and Kohli, 1993). This is essentially because MO enhances a firm's customer retention capability (Narver, Jacobson and Slater, 1999). Slater Narver (1994) found no support for the effect of market turbulence on the MO-performance link. This is quite surprising as marketing theory holds that consumer tastes and preferences dictate the consumer buying behaviour (Kotler and Armstrong, 2006). Therefore, we hypothesize that:

**H3** Market turbulence moderates the MO-profitability (performance) relations.

**H4:** Market turbulence moderates the MO-market share (performance) relations.

2.3 **Moderation effects of competitive intensity**

Profitability within any sector acts as a fodder for the attraction of new firms. As markets welcome new entrants, competition intensifies, thus eroding market shares, sales and profit (Kumar, et al., 2011). The prevalence of businesses and sectoral competition is a vital feature of a developing market. Higher levels of competition afford customers the share privilege of making choice decisions (Appiah-Adu, 1998). Thus, organisations' task suddenly and genuinely entails the identification and responses to customers' current and future needs including; changing tastes and preferences (Grewal and Tansuhaj, 2001). Monopoly firms on the contrary, would generate good performances regardless of changing customer needs, competition and any institutional changes by aiming to serve and satisfy customers (Houston, 1986). Therefore, in highly competitive markets, market oriented firms are capable of better performance. We hypothesize that:

**H5** Competitive intensity moderates the MO-profitability (performance) relations.

**H6:** Competitive intensity moderates the MO-market share (performance) relations.

2.4 **Moderation effects of technological turbulence**

The characteristics and performance of products in technologically turbulent markets are often determined by innovation within and outside the industry (Kumar, et al., 2011). Consequently, the effect of MO on performance diminishes in such market situation. Thus, during low levels of technological intensity, the MO-performance link will be stronger especially for improving new product performance (Tsai, Chou and Kuo, 2008). Nevertheless, strong learning orientation will be essential for the creation of sustainable competitive advantage (SCA) and superior market oriented processes (Baker and Sinkula, 1999). Hence, market oriented firms perform worse in technologically turbulent markets. We propose that:
**H7: Technological turbulence moderates the MO-profitability (performance) relations.**

**H8: Technological turbulence moderates the MO-market share (performance) relations.**

3 Research Methodology

*Measures and Instruments:* The Narver and Slater's (1990) 15 item MKTOR scale with adaptation to the Nigerian business environment is the study's measure. This is similar to prior research in developing/emerging markets (Bathgate, et al., 2006). Environmental moderators were measured using Jaworski and Kohli's (1993) scale, while objective performance is measured using profitability and market share.

*Data collection and sample:* Survey research approach was employed and questionnaire was the primary instrument for the study. Since there is no definitive sampling frame for all firms in Nigeria across all sectors and regions, the researchers constructed their version and included samples from the various states chambers of commerce, small and medium enterprises development agency in Nigeria (SMEDAN) and several other trade associations registered with the relevant government agencies. Consequently, simple random sampling technique was used to recruit research participants for the purpose of data collection. Five hundred questionnaires were hand delivered and administered to managers of varying departments and functions in two hundred (200) small, medium and large-sized firms across varying sectors in the country. The sample (managers from different organisations) includes Nigerians and foreign nationals. Two hundred and seventy questionnaires were completed and returned accounting for 54% response rate. However, twelve questionnaires were poorly completed and adjudged unfit for use and were appropriately dropped. This leaves us with two hundred and fifty eight aptly completed questionnaires and useable for analysis, which represent 51.6% response rate. This is consistent with response rates from similar prior MO studies. For example, Powpaka (2006) in Thailand had 48.5%, Li and Zhou (2010) in China 31.1% response rates in their separate empirical MO studies.

*Data analysis technique:* Confirmatory factor analysis (CFA), correlation and regression analyses were used for data analyses.

4 Results:

**Descriptive statistics for the MKTOR scale:**

<table>
<thead>
<tr>
<th>Mean</th>
<th>Variance</th>
<th>Standard Deviation</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.5004</td>
<td>4.528</td>
<td>2.12782</td>
<td>15</td>
</tr>
</tbody>
</table>

*Correlation:* Medium and small correlations were found and statistically significant at $p < .001$. 
Table 2. Result of Pearson Product-moment Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>MO</th>
<th>PROFITABILITY</th>
<th>MARKET SHARE</th>
</tr>
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<tbody>
<tr>
<td>MO</td>
<td>1</td>
<td>-.367</td>
<td>.128</td>
</tr>
<tr>
<td>PROFITABILITY</td>
<td>-.367</td>
<td>1</td>
<td>-.201</td>
</tr>
<tr>
<td>MARKET SHARE</td>
<td>.128</td>
<td>-.201</td>
<td>1</td>
</tr>
</tbody>
</table>

**P < .001 (2-Tailed)**

**Measurement validation:** Principal component analysis (PCA) revealed 15 factors for the MKTOR in our sample as defined in the MO literature (Narver & Slater, 1990). Confirmatory factor analysis (CFA) was conducted to establish reliability and discriminant validity of the MKTOR scale. Thus, sampling adequacy was measured using Kaiser-Meyer-Olkin measure (KMO). KMO is 0.790 which is greater than the 0.6 threshold (Pallant, 2007). Bartlett’s test of specificity value is equally significant at .05. Cronbach’s Alpha was .812 above the .7 threshold recommended by Nunnally (1978) and factor loadings were above the threshold. Hence, internal-consistency reliability, construct (discriminant and convergent) and structural validity were achieved.

Table 3. Results of Hypotheses Tests.

<table>
<thead>
<tr>
<th></th>
<th>Profitability</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>.167</td>
<td>.128</td>
</tr>
<tr>
<td>R square</td>
<td>.028</td>
<td>.016</td>
</tr>
<tr>
<td>Adjusted R square</td>
<td>.024</td>
<td>.013</td>
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<tr>
<td>Std Error</td>
<td>.446</td>
<td>.28918</td>
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</table>

Analysis of Variance (ANOVA)

<table>
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<th></th>
<th>DF</th>
<th>Sum of Square</th>
<th>Mean Square</th>
</tr>
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<tr>
<td>Regression (Profitability)</td>
<td>1</td>
<td>1.453</td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>256</td>
<td>50.892</td>
<td></td>
</tr>
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F= 7.311  Significant F= .007

<table>
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<th></th>
<th>DF</th>
<th>Sum of Square</th>
<th>Mean Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression (Market Share)</td>
<td>1</td>
<td>.359</td>
<td>.359</td>
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<tr>
<td>Residual</td>
<td>256</td>
<td>21.408</td>
<td>.084</td>
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F= 4.293  Significant F= .039

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<tbody>
<tr>
<td>Profitability</td>
<td>-.167</td>
<td>-2.704</td>
<td>.007</td>
</tr>
<tr>
<td>Market Share</td>
<td>.128</td>
<td>2.072</td>
<td>.039</td>
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</table>
Hypothesis testing: Table 3 shows the multiple regression analysis results of objective performance construct that I regressed on the model's explanatory variable (MO).

H1: R square = .028, p value<.05 (sig=.007). Thus, there is a relationship between MO and profitability though statistically significant, but weak. H1 is supported. H2: R square=.016, p value<.05 (sig. = .039), thus, the hypothesized relationship between MO and market share is supported. H3: when market turbulence is introduced to moderate the MO-profitability relationship, R square= .030, beta=.007, p value>.05 (not statistically significant), standard error of the model=.447 and VIF=1.049, rules out any possible issues of multicolinearity. Therefore, H3 is not supported. H4: when market turbulence is introduced to moderate the MO-market share relationship, R square= .018, beta=.010, p value>.05 (not statistically significant), standard error of the model=.29009 and VIF=1.399 below the 10.0 threshold, obviates suggestion of multicolinearity (Hairl, et al., 2010). H4 not supported. H5: moderation effect of competitive intensity on MO-profitability- R square= .03(increased), beta= 0.010, p value=.049 (significant, p<.05), VIF= 1.098. H5 is supported. H6: moderation effect of competitive intensity on the MO-market share relations. R square= .022, beta=.032, VIF= 1.098, p value =>.05 (not significant). Hence, H6 is not supported. H7= Technological intensity negatively moderates the effect of MO on profitability. R square= .050, beta =.004, p value=.005 (<.05, statistically significant), VIF= 1.049. H7 is supported. H8= Technological intensity moderates the effect of MO on market share. R square= .017, beta=.011, p value =>.05 (not significant), VIF= 1.049. H8 is not supported.

5 Discussion of result, Conclusion and Limitations of Study

The result shows that MO has a weak but direct effect on profitability and market share, both objective performance measures in Nigeria and similar to Tse et al's (2003) findings in a Chinese study. However, the moderation effect of market turbulence does not hold true for both profitability and market share. This is akin to Ellis's (2006) finding, using economic development, which often explains consumer behavior; he found that MO-performance link is weaker for developing economies vis-à-vis developed markets. This is rather a surprising finding and contradicts prior research in developed and developing worlds alike. Appiah- Adu (1998) found no support for the direct effect of MO on sales growth and return on investment, but an influence of environmental variable in the hypothesized relationship. The result is equally contrary to the Kumar, et al.'s (2011) finding on the strengthening (moderation) effect of market turbulence on the MO-sales and profit relations in a USA study. A possible explanation for the Nigerian finding could be that the market environment in the country is fast taking the shape of western countries. This might possibly be due to the large western influence in our study context. Interestingly, competitive intensity was found to play a moderating role in the MO-profitability relations but no effect on MO-market share relations. This mirrors Grewal and Tansujah's (2001) Indian study, Kumar, et al'. (2011), but contrary to Kirca, Jayachandran and Bearden (2005), Subramanian, Kumar and Strandholm (2009) who found no empirical support for the moderating roles of market and technological turbulence and competitive intensity on the MO-performance relations. These divergences might be attributed to the changing business landscape occasioned by changing behavioral and managerial patterns. The influx of foreign firms into the country, orchestrates competition, which informs firm managers on the need to become more market
oriented, thus, the effect on profitability of firms. However, firms with low MO drive lose their market shares that explain the lack of effect on market share (Jaworski and Kohli, 1993).

Finally, technological turbulence was found to negatively moderate the MO-profitability link but not for market share. This is in accord with the MO’s empirical literature, as technological turbulence weakens the MO-sales and profit relations (Rose and Shoham, 2002; Kumar, et al., 2011) and inconsistent with Subramanian and Gopalakrishna (2001). This finding may be due to high cost of technological innovation prevalent in our markets. Although, the moderation effects of environmental variables on the MO-profitability and market share links are mixed, this study is contrary to Cano, Carrillat and Jaramillo’s (2004) assertion that the relationship between MO and business performance is positive and consistent worldwide. This view is equally shared by Ellis (2006) who opined that the managerial value of MO is significantly affected by cultural and economic characteristics of the host country. It thus follows that firms coming into Nigeria should operate with the knowledge that the country shares nomological differences with their home countries.

The study's results and findings highlight two essential points. First, although, Dess and Robinson (1984), and Dawes (2000) found a strong correlation between objective assessment of firm performance and their subjective equivalent, the discrepancy in research findings using both measures continue to obfuscate MO appreciation and adoption. Thus, conflict arises due to the cultural, economic and social characteristics of the setting studied. Studies from western countries with a preponderance of USA studies report positive results, which lends support to the hypothesised relationships (Kohli and Jaworski, 1990), but found limited support in our study. Second, it is apparent that regardless of the environmental factors, MO alone might not be a strong predictor of objective performance. Thus, the weak link between the direct and indirect effect of MO on objective performance is suggestive of the reasoning that organizations need to identify and implement other strategic orientations including innovation, total quality management, learning, entrepreneurial and employee orientations along with MO to achieve greater performance outcomes (Atuehene-Gima and Ko, 2001; Nwokah, 2006). These are necessary for firms to develop dynamic capabilities, which are drivers of success, stability and sustainability within firms in emerging economies (Zhou and Li, 2010). This reasoning is rooted in the resource-based view theory (RBV) of the firm. RBV holds that firms who develop internal resources, which are valuable, rare, not easily imitable and good organization (VRIO framework), would better attain strong SCA (Barney, 1991). Terziovski (2010) found that a strong and positive link between internal resources (RBV) (innovation) and SME performance in firms in the manufacturing sector.

Consequently, the implication for firms is that MO practice could be used to achieve minimal objective performance. However, to overcome deleterious country (environmental) and institutional challenges and achieve SCA in the Nigerian fledgling and emerging economy by both Nigerian and foreign firms alike organizations need more orientations (Li and Zhou, 2010). Thus, the need to adopt other strategic orientations becomes imperative (Yannopouloas, Auh and Menguc, 2012). This study's findings are limited by the use of cross-sectional design and objective measures of firm performance. Future studies could explore other performance measures; objective vs subjective measures, use longitudinal research design. With this, the full effect of MO is established.
References


## REVISIONS AND TREATMENT OF ISSUES RAISED BY REVIEWERS ON EARLIER DRAFT PAPER

<table>
<thead>
<tr>
<th>ISSUES</th>
<th>HOW THIS IS ADDRESSED (TREATMENT)</th>
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<tbody>
<tr>
<td>(1) Re-balancing of paper</td>
<td>The literature review pruned, while an extension in the results and discussion sections was made with the Resource-based view of the firm (Barney, 1991) and the unsettled issue on the similarities between objective and subjective performance measures (Dess and Robinson, 1984; Dawes, 2000)</td>
</tr>
<tr>
<td>(2) Phrasing of hypotheses 7 and 8</td>
<td>The two hypotheses have been phrased consistent with the other hypotheses in the study for purposes of uniformity and clarity.</td>
</tr>
<tr>
<td>(3) Results section</td>
<td>Tables summarizing results of various statistical tests have been added for presentation purposes of clarity.</td>
</tr>
<tr>
<td>(4) Discussion section</td>
<td>The section has been expanded, extended and highlights other possible theoretical explanations to results.</td>
</tr>
<tr>
<td>(5) Theoretical contribution</td>
<td>The inclusion of the Resource-based view of the firm offers a strong theoretical contribution to the MO body of knowledge. It offers suggestions on identification and implementation of other strategic orientations along with MO to ensure high performance outcomes in organizations (Terziovski, 2010).</td>
</tr>
<tr>
<td>(6) Re-structuring of theoretical framework</td>
<td>Consistent with the research objectives, the conceptual framework has been re-structured to represent both the direct effect of MO on objective performance measures and the moderating effects of environmental variables.</td>
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<tr>
<td>(7) Results from similar studies in developing economies</td>
<td>Compared to MO studies in other developing and developed economies including China, India and Thailand.</td>
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