

**EXPORT MARKET-ORIENTED BEHAVIOR AND EXPORT PERFORMANCE:
QUADRATIC AND MODERATING EFFECTS UNDER DIFFERING DEGREES OF
MARKET DYNAMISM AND INTERNATIONALIZATION**

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ABSTRACT

Findings in the market orientation research stream generally indicate that market orientation has a positive linear relationship with business success, and managers are urged to be more market-oriented, regardless of the firm's current market orientation level. The authors develop a theory predicting that the relationship between market orientation and business performance is invert U-shape, such that high levels of market orientation may reduce performance. The authors' empirical study of exporting firms' market-oriented activities in their export operations [EMO behavior] finds support for the hypothesized invert U-shape relationship between EMO behavior and export sales performance. They show that the U-shape relationship becomes greater in magnitude (more pronounced) as market dynamism increases, and that the optimal value of EMO behavior (i.e., the value that generates the highest performance return) decreases as market dynamism increases, and increases as exporting businesses' internationalization increases. Management's task, then, is not to seek ever-increasing levels of market orientation, but to manage market orientation so that its level is optimal given the firm's environment and the international diversification strategy being pursued.

Keywords: optimizing market orientation, export performance, international diversification strategy, export market orientation, internationalization

The strategy literature identifies market orientation as a critical marketing capability, a key strategic resource that potentially provides firms with positional advantage and enhances business success (e.g., Hult and Ketchen 2001; Hult, Ketchen and Slater 2005). In the export performance research field, market orientation increasingly is receiving attention as a potential determinant of export success (Sousa, Martínez-López and Coelho 2008), with researchers exploring the relationship between the extent to which exporters adopt and implement market orientation and export performance (e.g., Akyol and Akehurst 2003; Beaujanot, Lockshin and Quester 2006; Kwon and Hu 2000; Murray et al. 2007; Racela, Chaikittisilpa and Thoumrungroje 2007; Rose and Shoham 2002).

In this growing body of research, debate is also focusing on the issue of whether there are situations in which, or certain types of businesses for whom, the adoption of market orientation is more or less important for exporters (e.g., Cadogan, Diamantopoulos and Siguaw 2002; Cadogan, Cui and Li 2003; Rose and Shoham 2002). For instance, Cadogan, Cui and Li (2003) show that aspects of environmental turbulence moderate the relationship between exporters' market-oriented behavior in their export markets and their export performance. Unfortunately, the results from other studies make it hard to draw definitive conclusions on this front. For instance, Cadogan, Diamantopoulos and Siguaw (2002) and Rose and Shoham (2002) uncover only linear relationships between the market-oriented behavior of exporters and their export performance. Unsurprisingly, researchers are calling for more research into how exporters' market orientation influences export success (Murray et al. 2007).

Potentially, this lack of consistency in findings might be partly attributable to a lack of precision when specifying the form of the relationship between market orientation and performance in an export setting. That is, market orientation and performance in an export setting are typically

assumed to have a linear relationship, and environmental contingencies are sought as moderators of a linear market orientation—performance association (e.g., Cadogan, Diamantopoulos and Siguaw 2002; Kwon and Hu 2000; Rose and Shoham 2002). Yet, in a study of Chinese export agents, Cadogan and Cui (2004) find an invert U-shape (negative quadratic) relationship between market-oriented activity and business performance. If the relationship between market orientation and performance is quadratic, such that performance declines with excessive market orientation, then failure to model this aspect of market orientation's association with performance when testing for environmental moderators may be an explanation for inconsistencies in the latter results. A key issue, therefore, revolves around solving the question of whether the relationship between market orientation and performance is linear or quadratic for exporting firms.

It is also likely that important variables are missing from models of the relationship between market orientation and export success (Murray et al. 2007). One such variable is the exporting firm's degree of internationalization. For example, Ellis (2007) indicates that there is evidence to suggest that the market orientation—performance relationship is stronger in samples drawn from businesses with large domestic market operations, and is weaker (or absent) in samples drawn from businesses with high levels of international marketing involvement. On the other hand, and contrary to this perspective, the internationalization literature emphasizes the greater importance of the activities that underpin market-oriented behavior (generating market knowledge and careful response to it) for firms with greater international involvement (e.g., see Contractor 2007; Hennart 2007; Kafourous et al. 2008; McDougall and Oviatt 1996). This latter literature argues that activities that are fundamental elements of market-oriented behavior are critical determinants of international business success, and are even more necessary for firms that are more internationally involved. These two perspectives are at odds, flagging the possibility that market orientation's relationship with performance may not be consistent across varying levels of internationalization.

Taking these observations and insight as our cue, we seek to contribute to the export marketing strategy literature by examining in more detail how market orientation contributes to export performance.¹ Our approach to theory development is grounded in the resource based view of the firm, in which market-oriented activity is viewed as a business resource (capability) that helps firms achieve positions of sustainable competitive advantage and thus superior business performance (e.g., Hult and Ketchen 2001; Morgan and Hunt 1995; Narver and Slater 1990). We also weave into this a contingency theory view of market orientation. Specifically, building on the logic presented by Atuahene-Gima, Slater and Olson (2005), Cadogan and Cui (2004), and Gatignon and Xuereb (1997), for instance, our theory recognizes that the utility of market-oriented behavior as a firm-level resources is contingent on the internal and external environments firms face. Accordingly, our core research question is: Is the relationship between exporters' market-oriented behaviors in their export operations and their export performance linear, or is it non-linear? We also explore whether this relationship depends on the market dynamism firms face in their export markets and/or exporters' choices in terms of international diversification strategies followed.

Answers to these critical issues are required in order to develop a more realistic picture of market orientation's nomological network, particularly within the context of firms' international marketing activities. Indeed, the incorporation of degree of internationalization into models of the relationship between market orientation and export performance constitutes a major step, since such a model is unique to the international marketing context.

Answers to these questions are also imperative from a managerial perspective. Currently, the advice for practicing export managers is rather unidimensional, and appears to follow the route of suggesting that more market-oriented behavior is good, for all exporters, no matter what their circumstances. Yet, our model identifies possible situations where increasing market-oriented

activity may not be appropriate, or even may harm export performance, and our results also show that this is the case. Our model also addresses the issue of export strategy (degree of internationalization), and provides insights into how exporters should manage their market-oriented behavior as they grow their exporting businesses. As a result, this study presents a fresh perspective for export managers, providing them with more fine-grained recommendations about the potential drawbacks and benefits of being market-oriented in their firms' export operations. In the next sections, we define our core variables and present the study hypotheses. We then outline the methods used to assess the hypotheses and present our findings. We conclude with a discussion, and outline future research requirements.

CONCEPTUAL MODEL

Export market orientation is the focus of growing scholarly interest. The term export market orientation generally is used to refer to the activities that firms perform in their efforts to enact the marketing concept in their export operations, and the market-oriented activity that a firm performs in its export markets is termed export market-oriented [EMO] behavior. EMO behavior is defined as the export-focused generation, dissemination and responsiveness to export market intelligence (Cadogan, Diamantopoulos and de Mortanges 1999). What then, is the relationship between EMO behavior and export performance? Does EMO behavior lead to enhanced export success? And what is the form of the relationship (e.g., is it linear or quadratic)? Are there export-specific moderators of the EMO behavior—export performance linkage (e.g., export environmental conditions, degree of internationalization)? We deal with these issues in the following sections.

Our conceptual model is presented in Figure 1. The model proposes a positive linear relationship between EMO behavior and export success. It also presents a competing hypothesis, that the

relationship between EMO behavior and export success is non-linear (negative quadratic). The form of the quadratic relationship is argued to be dependent on market dynamism, and on the international strategy pursued by the business (degree of internationalization). We also investigate whether market dynamism and degree of internationalization interact to shape the relationship between EMO behavior and export performance.

Figure 1 about here

EMO Behavior and Export Performance

Within the export market orientation literature, research focuses on determining whether the relationship between firms' EMO behavior and their export performance is positive. The logic underpinning this potential relationship is straightforward, and is firmly grounded in the resource-based view of the firm (e.g. Hunt and Morgan 1995). On the one hand, EMO behavior provides the firm with the capability to create superior value for export customers: "if a firm consistently identifies and responds to customers' current needs and preferences and is able to anticipate future needs and preferences, it will be in a better position to satisfy customers and perform well against competitors" (Cadogan, Diamantopoulos and Siguaw 2002, p. 618). Thus, export market-oriented firms are better informed about the needs and wants of their target markets, and will be better positioned than their less market-oriented competitors to tailor products and services for those markets. Furthermore, the informational advantages accruing from EMO behavior mean that those exporters that are more market-oriented will be wiser than their competitors in their choices of export target markets, and will choose their export marketing strategies in those target markets more effectively (Day and Wensley 1988; Hunt and Morgan 1995).

Additionally, as Hunt and Morgan (1995, p. 13) explain, market-oriented behavior is intangible (a firm cannot simply purchase EMO behavior in the marketplace), "is socially complex in its

structure, has components that are highly interconnected”, and has “a significant tacit dimension.” As such, export function employees learn how to be market-oriented by associating with others in the firm who are already market-oriented, not just by reading policy manuals, say, or textbooks (Hunt and Morgan 1995). Accordingly, EMO behavior is theorized to be a resource that can lead to a position of *sustainable* competitive advantage and thus long run superior export business performance.

This resource-based view identifies EMO behavior as a rare and inimitable marketing capability, and has motivated researchers to explore the empirical evidence to establish whether EMO behavior performs as theory dictates. In this respect, there are a growing number of studies examining the linear relationship between EMO behavior and export performance (e.g., Akyol and Akehurst 2003; Cadogan and Diamantopoulos 1998; Cadogan, Diamantopoulos and de Mortanges 1999; Murray et al. 2007). The bulk of this research provides evidence that EMO behavior is positively related to multiple facets of export performance (e.g., sales volume, growth profits, market share, market entry). Accordingly, our first hypothesis sets down the most basic of relationships between EMO behavior and export success.

H1: *There is a positive linear relationship between EMO behavior and export performance.*

An Alternative Hypothesis: Quadratic Relationship

A competing hypothesis is that EMO behavior and export success have a non-linear relationship. A problem with H1 is that it implies that performance will *always* increase with higher EMO behavior levels. However, this implication fails to recognize that: (a) firms operate with limited budgets and must prioritize their resource allocation investments optimally; (b) developing and maintaining a firm’s EMO behavior level is expensive, requiring significant resource investments (Slater and

Narvery 1994); and (c) orientations other than a market orientation (e.g., technological orientation, entrepreneurial orientation, learning orientation, innovation orientation) are critical to the provision of superior customer value and sales success (e.g., Gatignon and Xuereb 1997; Hult and Ketchen 2001). Accordingly, to achieve very high levels of EMO behavior, investments in other orientations may need to be cut to fuel the increase in export market information generation, dissemination and response behaviors. Thus, ever increasing EMO behavior levels will likely come at the expense of reduced investment in other important customer value enhancing strategic orientations. Eventually, increases in customer value achieved by developing higher EMO behavior levels will be exceeded by reductions in customer value resulting from reduced investments in other strategic orientations.

This reasoning leads us to conclude that EMO behavior will have an invert U-shape relationship with export performance. Interestingly, an invert U-shape is also what Atuahene-Gima, Slater and Olson (2005) predict will be the relationship between market orientation and aspects of business success, and is what Cadogan and Cui (2004) find in their empirical study of the relationship between EMO behavior and export success. As a result, we present the following hypothesis.

H2: An invert U-shape relationship exists between EMO behavior and export performance.

Market Dynamism as Moderator

The strength of any invert U-shape relationship between EMO behavior and export performance may be moderated by the degree of market dynamism facing the firm. Specifically, EMO behavior may have less utility when export customers, their needs and requirements, and the factors affecting those needs and requirements are static and predictable, since only minor adjustment to the marketing mix are needed to service these stable preferences (Cadogan, Diamantopoulos, and Siguaw 2002). When the environment is more dynamic, the chances are greater that there will be a

divergence between the company's offerings in its export markets and export customers' preferences, and it is in this context that EMO behavior will be more effective. Following this logic, we expect to see the positive relationship (i.e., the up-slope) between EMO behavior and export success become larger in magnitude (i.e., steeper) as market dynamism increases.

However, this logic holds only for relatively low levels of EMO behavior. As export markets become more dynamic, orientations other than a market orientation may become more critical to the provision of superior customer value. For instance, Gatignon and Xuereb (1997) demonstrate that under conditions of high market dynamism, investments in firms' technological orientations become more critical, and the relationship between technological orientation and business success becomes stronger. Similarly, Lumpkin and Dess (2001) argue that under conditions of increased dynamism, entrepreneurial orientation is more closely related to business success, and show that the relationship between entrepreneurial orientation and performance is stronger when dynamism is higher. Thus, in highly dynamic markets, there is likely to be more rapid shrinkage in the marginal performance gains obtained from investing resources in EMO behavior, since these investments in EMO behavior may come at the expense of investing in other increasingly important sales-driving business activities, such as developing a technological orientation or an entrepreneurial orientation. By this logic, in highly dynamic markets, and under high levels of EMO behavior, we expect to see the negative relationship (i.e., the down-slope) between EMO behavior and export success become larger in magnitude (i.e., steeper). Accordingly, we present the following hypothesis.

H3: The invert-U-shape relationship between EMO behavior and export performance becomes larger in magnitude as market dynamism increases.

Degree of Internationalization as Moderator

An exporter's degree of internationalization is a multifaceted construct, incorporating two core elements of a firm's strategy for export activity, scale and scope (Tallman and Li 1996). The scale of the firm's export operations refers to the quantity of exporting business done relative to overall operations, whereas scope of exporting activities refers to the range of geographic regions and countries in which the firm is operating (Tallman and Li 1996). These two aspects of internationalization underpin the concept of a firm's international diversification strategy (Tallman and Li 1996), and in combination they determine a firm's degree of internationalization, with exporters that have greater scale and scope being seen as more international (Kuivalainen, Sundqvist and Servais 2007).

Importantly, firms that change their degree of internationalization are not just changing an internal aspect of the firm's strategy. Internationalization brings with it environmental complexity, and for this reason, McDougall and Oviatt (1996, p. 27) conclude that degree of internationalization "is an important environmental contingency... in addition to increased logistical costs, entrepreneurs and managers may need to learn something about foreign laws, language, culture, and competitors".² Furthermore, the marketing and management competencies and skills that provide the exporter with competitive advantage in its domestic and current international markets may not be the same as those that create advantage in new export markets (McDougall and Oviatt 1996). Thus, when firms expand internationally, they must learn how to change and adapt their export strategies "to be congruent with their new environment[s]" (McDougall and Oviatt 1996, p. 27).

Interestingly, the strength of the invert U-shape relationship between EMO behavior and export performance may be moderated by degree of internationalization. EMO behavior may have less of an effect on export performance when degree of internationalization is low. This is because, with fewer markets to monitor and manage, lower levels of EMO behavior are needed to ensure there is

no mismatch between export customers' preferences and the exporters' offerings. When an exporter adopts a greater degree of internationalization, however, the firm needs to learn about multiple new markets, and maintain awareness and respond to changes occurring in those multiple markets (e.g., Contractor 2007; Hennart 2007; Kafouros et al. 2008; Liesch and Knight 1999; McDougall and Oviatt 1996). Here, there is greater likelihood that the firm will miss important changes occurring across those markets, and that the firm's offering will be less well suited to the preferences of the firm's multiple customers. This will be even more likely when the firm expands into geographically and psychically distant markets (becomes more international), where customer preferences are less well understood. In this situation, EMO behavior should be most effective at driving the firm's success, and the positive relationship (i.e., the up-slope) between EMO behavior and export success should become larger in magnitude (i.e., steeper) as degree of internationalization increases.

Again, this logic holds only under low levels of EMO behavior. Contractor (2007, p. 459) argues that the information processing and coordination challenges brought about by internationalization "increase by more than a linear relationship with the degree of internationalization". Thus, the resources required to maintain or bolster EMO behavior for firms that are internationalizing will grow rapidly, and may become untenable quickly as EMO behavior levels increase (Ellis 2007). That is, since firms operate with limited resources, the greatly enhanced resource requirements needed to maintain or develop EMO behavior under conditions of higher internationalization may lead to a rapid and greater than linear decrease in investment in other important sales driving strategic orientations. For firms that are highly international, then, under high EMO behavior levels, we expect the negative relationship (i.e., the down-slope) between EMO behavior and export success to be larger in magnitude (i.e., steeper) relative to firms that are less international.

H4: The invert-U-shape relationship between EMO behavior and export performance becomes

larger in magnitude as degree of internationalization increases.

We also propose that the moderating role of internationalization on the quadratic relationship between EMO behavior and export success is stronger under higher levels of market dynamism. When internationalization and market dynamism are both low, there is little reason for the firm to adopt EMO behavior, since there are few markets to monitor, and few changes occurring in those markets. However, when firms are highly international, and its markets are also dynamic, the need for EMO behavior intensifies. Not only might needs and preferences vary from market to market, they may also be evolving rapidly and in unpredictable ways. Here, EMO behavior is most effective, providing decision-makers with critical information, and ensuring that responses to that information are designed and implemented such that the company's offerings continue to match all the various export customers' preferences. Accordingly, we expect the increase in magnitude in the EMO behavior—export success relationship that results from greater internationalization to become larger in size as market dynamism increases.

Once more, this logic holds only for low levels of EMO behavior. The literature argues that strategic orientations other than EMO behavior are increasingly important determinants of company success as market dynamism increases, yet, these other strategic orientations are not free from resource requirements. As market dynamism increases, so too do the required investments in developing alternative strategic orientations. When market dynamism and internationalization are both high, the development of high levels of EMO behavior across the firm's multiple markets will plunder the firm's resources at the exact time that those resources are needed to cope with increased market dynamism (i.e., so that investments can be made in other orientations). Accordingly, under high EMO behavior, the increase in the magnitude of the negative relationship between EMO behavior and export success resulting from increased internationalization becomes larger in size as

market dynamism increases. Thus, our final hypothesis is:

H5: The moderating effect that degree of internationalization has on the invert-U-shape relationship between EMO behavior and export performance increases in strength as market dynamism increases.

RESEARCH METHOD

We test our model using data from a cross-sectional mail survey of exporting firms. Our approach follows the tradition of research methodologies used in market orientation studies, in that we employ a knowledgeable expert within the firm to provide information on the firm's EMO behavior, business environment and export successes. As Rindfleisch et al. (2008) demonstrate, this approach is reasonable given that: the constructs in it are relatively concrete and externally verifiable; like many strategy studies, there are likely to be low levels of response bias arising from the characteristics of the measures or informants; and, our research utilizes between-subject arguments.

Data Collection

Our sample frame was *Kompass Finland's* entire database of 1205 Finnish exporting firms with 50 or more employees. All firms in the sample frame were contacted by telephone in order: (a) to ensure that contact details were correct, (b) to determine firm and respondent eligibility, and (c) to obtain cooperation in the study. Our target contact was either the export marketing manager, the marketing manager, the CEO or else the person that a firm representative said would know most about the firm's exporting operations. Firms agreeing to participate were mailed a questionnaire and a cover letter explaining the study. Ten days after the initial mail-out, a reminder card was sent to each non-respondent. Seven days after the reminder cards were mailed, a second questionnaire and

cover letter were mailed to non-respondents.

Of the database's listed contacts, 237 were ineligible (had never exported, no longer exported, or were listed more than once), leaving a total of 968 eligible firms. Of these, 21 declined to participate and 783 usable responses were returned, a response rate of 81%.³ A comparison of early and late respondents uncovered no significant differences, indicating that non-response bias was not a problem (Armstrong and Overton 1977). The median number of employees in the firms sampled is 165, and the average firm has been exporting for 27 years, exports to 22 countries, and generates 49% of sales from export markets. A wide range of industries responded to the survey, including firms in the following sectors: food, drinks, tobacco; textiles, clothing; forest industries; chemical; metal; machinery and equipment; electronics; manufacturing; and industrial services.

Measurement Items

In line with Cadogan, Diamantopoulos and Siguaw (2002), Cadogan et al. (2006), and Murray et al. (2007), among others, we opted to use shortened versions of Cadogan, Diamantopoulos and de Mortanges' (1999) export market orientation scales. The three scales capture firms' export market intelligence generation, dissemination and responsiveness behaviors, respectively (see Appendix for a list of items used). The items used a Likert format with a seven-point scale. *Market dynamism.* Our measure of dynamism is based on Cadogan, Diamantopoulos and Siguaw's (2002) adaptation of Jaworski and Kohli's (1993) market dynamism scale. Cadogan, Diamantopoulos and Siguaw (2002) modified the latter so that it explicitly taps market dynamism in the firm's export markets (as opposed to domestic or unspecified markets), and as such, the measure captures the rate of change, hostility, and heterogeneity inherent in the firm's export markets. The items used a seven-point scale with "not at all" and "to an extreme extent" anchors.

To capture degree of internationalization, we assessed both scale and scope of export activities. Scale of internationalization is measured as the proportion of export sales relative to overall sales (Kuivalainen, Sundqvist and Servais 2007). Scope contains two elements. First, we capture the number countries the firm exports to, since this provides a snapshot of the multinationality (Tallman and Li 1996) of the firms' export operations. Second, to capture the geographic diversity, or psychic dispersion (Sullivan 1994), of the firm's export activities, we asked respondents to indicate how many geographically distinct regions they export to (from a list of eight potential regions). Scores for these three elements of internationalization were standardized and equally weighted to create a single score for degree of internationalization (c.f., Sullivan 1994).

Export performance is a multidimensional construct, incorporating economic and noneconomic components (Katsikeas, Leonidou and Morgan 2000). Our conceptual model predicts that, to a point, increased EMO activity will furnish the firm with greater ability to identify and exploit strategic options that arise in the business environment (Johnson et al. 2003). Firms with higher levels of EMO behavior should find that they can compete more easily in the markets they operate in. Accordingly, we chose to examine the export sales performance of firms' export operations, since EMO behavior should have a noticeable influence on this aspect of a firm's performance. Furthermore, export sales performance is the most commonly studied aspect of export performance in the literature (Katsikeas, Leonidou and Morgan 2000).

Interestingly, there is a trend to measure export performance at the export venture level, regardless of the level at which the researcher develops their theory. Of course, the risk of drawing invalid conclusions is greater when researchers incorrectly match up levels of theory and measurement (Sousa, Martínez-López and Coelho 2008), so it is important that measurement equates to the level at which the theory has been developed. Given that our theory is developed at the level of the firm

(not at the level of a single export venture), the most appropriate level of measurement for export performance is also at the firm level. Accordingly, we assessed export sales performance across all the firm's export operations. The measure draws on items proposed by Cadogan, Diamantopoulos and Siguaw (2002), capturing the extent to which firms' management are satisfied with their firms' performance in terms of export sales volume, export market share, and export market entry, as well as an assessment of sales growth relative to the industry average. All four items used a ten-point scale, with "very dissatisfied" and "very satisfied" as anchors for the three satisfaction measures, and "poor" and "outstanding" as anchors for the sales growth measure.

Measure Assessment

All reflective measurement items were simultaneously entered into a confirmatory factor analysis (CFA) using LISREL 8.72, the covariance matrix as input, and the maximum likelihood estimation procedure. Fit indexes are provided in Table 1, and it can be seen that the model fit heuristics returned were good: although χ^2 is significant (as one might expect given the relatively large sample size), all remaining fit heuristics were within recommended benchmarks. Table 1 also provides the correlation matrix and selected descriptive statistics for each of the measures in the model.

Table 1 about here

Our model of EMO behavior views the construct as formative, comprised of three first-order factors (export market intelligence generation, dissemination and responsiveness) (Jarvis, McKenzie and Podsakoff 2003). In constructing the measure of EMO behavior, we followed established procedures and created a composite measure of EMO behavior (e.g., Cadogan et al. 2001, 2006). That is, we first averaged the export market intelligence generation items, to create a single item measure (GEN). Likewise we created a single item measure for export market intelligence dissemination (DISS) by averaging the scale's items, and a single item measure for export market

intelligence responsiveness (RESP) by averaging the scale's items. We then averaged across GEN, DISS and RESP to create a single item score for EMO behavior. As can be seen in Table 1, all average variances extracted exceed the squares of the correlations between latent variables, providing support for the discriminant validity of the scales. Furthermore, the composite reliabilities are all large (near .80), and the average variances extracted are all near or above .50. Accordingly, the measures display sufficient convergent and discriminant validity for model testing purposes.

We also ran a method bias model. Here, a method factor is specified as loading on all items in the measurement model: if method bias is present, it should account for a significant proportion of the relationships between variables, and the model should produce reasonable fit (Podsakoff et al. 2003). Table 1 shows that imposing a method factor on the items results in poor fit, indicating that a method factor does not account for a large proportion of common variance in the data.

ANALYSIS

To test the hypotheses, we use traditional product-term analysis, which requires that we create a series of multiplicative product terms to enter into our equation. First, because we expect an invert U-shape relationship between EMO behavior and export performance, we created a quadratic term by squaring the EMO behavior variable. Also, because H3 argues that market dynamism changes the form of the quadratic relationship between EMO behavior-squared and export performance, we created product terms by multiplying the EMO behavior-squared term by market dynamism. Since H4 argues that degree of internationalization changes the form of the quadratic relationship between EMO behavior-squared and export performance, and H5 argues that market dynamism moderates this latter relationship, we created two additional product terms: the first by multiplying the EMO behavior-squared term by degree of internationalization, and the second by multiplying together the

EMO behavior-squared, the market dynamism, and the degree of internationalization terms. Finally, in order to ensure that our model is parsimonious, we followed recommended procedures (Aiken and West 1991) and created all lower-order interactions: these, together with direct effects, were used as control variables (see Equation 1 below). Our analysis strategy was to estimate Equation 1 using LISREL 8.72:

$$\begin{array}{l}
 \text{Equation (1):} \\
 \text{Export Sales} = \underbrace{\gamma_1 \text{EMO}}_{\text{H1}} + \underbrace{\gamma_2 \text{EMO}^2}_{\text{H2}} + \underbrace{\gamma_3 \text{EMO}^2 \times \text{MD}}_{\text{H2 \& H3}} + \underbrace{\gamma_4 \text{EMO}^2 \times \text{DOI}}_{\text{H2 \& H4}} + \underbrace{\gamma_5 \text{EMO}^2 \times \text{DOI} \times \text{MD}}_{\text{H2, H3, H4, \& H5}} + \\
 \text{Performance} \\
 \left. \begin{array}{l}
 \gamma_6 \text{MD} + \gamma_7 \text{DOI} + \gamma_8 \text{EMO} \times \text{MD} + \gamma_9 \text{EMO} \times \text{DOI} + \\
 \gamma_{10} \text{DOI} \times \text{MD} + \gamma_{11} \text{EMO} \times \text{DOI} \times \text{MD} + \delta_1
 \end{array} \right\} \leftarrow \text{Controls}
 \end{array}$$

where EMO = EMO behavior, MD = market dynamism, DOI = degree of internationalization, γ_i are the slope estimates, and δ_1 is the residual variance. In terms of the hypotheses, support for H1 will be obtained if γ_1 is positive and significant, and all other hypotheses are rejected. H2 is nested within H3, H4 and H5 and, consequently, support for H2 will be obtained if any of γ_2 , γ_3 , γ_4 , or γ_5 is negative and significant. H3 is nested within H5, and so support for H3 will be obtained if γ_3 or γ_5 is negative and significant. H4 is also nested within H5, and so support for H4 will be obtained if γ_4 or if γ_5 is negative and significant. Finally, support for H5 is obtained if γ_5 is negative and significant.

Given the presence of quadratic and multiplicative terms in our model, it is recommended that model complexity be reduced by using single observed scores for the variables involved in the quadratic and multiplicative terms (e.g., Jöreskog and Yang 1996; Ping 1995). Thus, in addition to creating the EMO behavior score (explained earlier), we also created a single observed score for market dynamism (by averaging the scale's items), and degree of internationalization (by averaging the scale's items). These scores we used to create the multiplicative terms described in Equation (1). Also, given the presence of quadratic and interaction terms, multicollinearity can be problematic

when model testing. As a result, Little, Bovaird and Widaman's (2006) recommended procedure for orthogonalizing observed quadratic and interaction terms was followed. We use these orthogonalized values in the subsequent analysis.

Table 1 provides the structural model fit information for Equation 1. In Model 1 (the constrained model), only the main effects are allowed to be estimated freely – the quadratic and interaction terms are fixed at zero. In Model 2 (the unconstrained model), the quadratic and interaction terms are freely estimated. The reduction in χ^2 on moving from the constrained to the unconstrained model is significant, indicating that the unconstrained model is a better fit to the data than the constrained model. The unconstrained model returns satisfactory fit heuristics, and as a result, we use the unconstrained model to assess the hypotheses.

FINDINGS AND DISCUSSION

Tests of Hypotheses

Table 2 provides the path estimates and the t-values for Model 2, the unconstrained model, and Figure 2 provides surface plots of the estimates for Equation (1) which are obtained using procedures outlined in Aiken and West (1991). Figure 2a and Figure 2b offer different visual perspectives of the same plots (front and reverse) to aid interpretation.

Table 2 and Figure 2 about here

H1 specifies that the relationship between EMO behavior and export performance is positive and linear. Support for H1 is provided if γ_1 is positive and significant, *and* all other hypotheses are rejected. Looking at Table 2, we can see that the γ_1 is positive and significant ($\gamma_1 = .33, p < .05$). However, H1 is not the only hypothesis supported, and so we reject H1. H2 finds support if any of

γ_2 , γ_3 , γ_4 , or γ_5 is negative and significant. Although the γ_2 path is not significant ($\gamma_2 = .02$, ns), the γ_3 path is significant ($\gamma_3 = -.12$, $p < .05$). Support for H2 indicates that at higher levels of EMO behavior, the relationship between EMO behavior and export sales performance becomes negative (see Figure 2). This makes good sense: as one reviewer put it, “what goes up must come down”, and it seems that there is strong support for the notion that export sales success needs more than just higher EMO behavior. At some stage, investing in EMO behavior represents an opportunity cost, since it is drawing on resources that would be better employed elsewhere.

The significant γ_3 parameter also provides support for H3, which specifies that the magnitude of the invert U-shape relationship between EMO behavior and export performance becomes greater as market dynamism increases. This is shown diagrammatically in Figure 2. Focusing on, say, firms with a high degree of internationalization, Figure 2 shows that when market dynamism is low, the positive relationship between EMO behavior and export sales performance decreases in magnitude as EMO behavior levels increase, until an optimal value of EMO behavior is reached – the “sweet spot” (see Mantrala et al. 2007, p. 26) – where sales performance is maximized, and the relationship between EMO behavior and export performance is zero. EMO behavior levels above the sweet spot result in decreased performance, with the negative EMO behavior– sales performance relationship slowly becoming stronger as EMO behavior levels increase. However, when market dynamism is high, the invert U-shape relationship between EMO behavior and export sales performance is much steeper and pronounced: under low levels of EMO behavior (on the left hand side of the sweet spot), there is a more rapid rise in export sales performance as EMO behavior increases. Likewise, under high levels of EMO behavior (on the right hand side of the sweet spot), there is a more rapid decline in export sales performance as EMO behavior levels increase still further.

In terms of H4, this hypothesis proposes that the invert U-shape relationship between EMO

behavior and export performance becomes stronger as degree of internationalization increases. H5 is an extension of H4, and argues that internationalization's role in shaping the invert U-shape relationship between EMO behavior and export performance becomes greater as market dynamism increases. Accordingly, we discuss the findings for these hypotheses together. Although γ_4 is negative and is significant at 10%, it is not significant at 5% ($\gamma_4 = -.05$, ns). Furthermore, the γ_5 parameter is also non-significant ($\gamma_5 = -.01$, ns). The failure of both these parameters to return significant estimates means that we reject both H4 and H5. Thus, we cannot conclude that degree of internationalization changes the form of the relationship between EMO behavior and export sales performance (regardless of degree of market dynamism). Lack of support for these hypotheses, particularly H4, could be attributed to low power, combined with the possibility that the effect size may not be very large. Alternatively, the results may simply indicate that EMO behavior is no more or less potent a driver of export sales performance, irrespective of the firm's degree of internationalization. Clearly, additional research is needed on this front.

Post Hoc Examination of Findings for Equation 1

As well as providing information on the hypothesized relationships, the results obtained from testing Equation 1 also provide two additional pieces of information regarding the relationship between EMO behavior and export sales performance. First, an examination of Figure 2 shows that the optimal value of EMO behavior changes in magnitude as market dynamism changes. Specifically, the optimal value of EMO behavior (i.e., the sweet spot) *decreases* in value as market dynamism increases. This can be seen more clearly in Figure 3a.

Figure 3 about here

Why might the sweet spot decrease in value as market dynamism increases? A reasonable assumption appears to reside in the arguments supporting H3, which specifies that orientations other

than EMO behavior grow in importance in more dynamic markets. As other orientations become more influential in shaping export success, the more marginal is EMO behavior's contribution to export performance. Accordingly, the sweet spot will be reached more rapidly, and the optimal level of EMO behavior will drop in magnitude. Thus, referring to Figure 3a, all things equal, a firm operating in relatively stable markets with an EMO behavior level at m_1 has an optimal EMO behavior level, and its performance (p_1) is maximized. However, if over time the firm's markets become more dynamic, but its EMO behavior level remains constant, one might expect the firm's performance to drop from p_1 to p_2 . Similarly, if a firm operates in relatively dynamic markets, and its EMO behavior level is m_2 , then its performance will be optimal (p_3). However, if over time its markets stabilize, but its EMO behavior level remains constant, one might expect the firm's performance to rise from p_3 to p_4 (driven by reduced market dynamism – the main effect for market dynamism is negative and significant: $\gamma_6 = -.06, p < .05$): however p_4 will be less than p_1 , due to the less than optimal value of EMO behavior.

A second finding concerns degree of internationalization, where an examination of Figure 2 shows that the optimal value of EMO behavior increases as degree of internationalization increases. This finding is driven by the significant three-way interaction between EMO behavior, degree of internationalization and market dynamism ($\gamma_{11} = .13, p < .05$) (see the control paths, Table 2). Thus, as internationalization increases (i.e., complexity increases) more EMO behavior is required to achieve optimal sales performance. The implication here is that, all other things being equal, firms that become more international but maintain the same level of EMO behavior are spreading the same amount of activity across more customers, more markets, and/or more regions. In effect, firms that maintain their EMO behavior level while increasing their degree of internationalization are diluting their EMO behavior activity, and their export performance may suffer as a result (assuming they are operating on the left-hand side of the sweet spot). The repercussion of the logic

underpinning this contingency-based argument is presented diagrammatically in Figure 3b. All other things equal, a firm operating with a lower degree of internationalization and having an optimal EMO behavior level of m_1 (i.e., operating at the sweet spot) achieves performance level p_1 . However, if this firm increases its degree of internationalization, but maintains the same level of EMO behavior, the spreading of EMO activities across additional customers, markets and regions will dilute the effectiveness of EMO behavior, thereby reducing its performance impact. At EMO behavior level m_1 , this more international exporter will reap performance benefits only to the level of p_2 . The firm would need to increase its EMO behavior level to m_2 to maintain performance at p_1 , and increase EMO behavior up to the sweet spot (m_3) if it wanted to maximize sales success at p_3 .

CONCLUSIONS

In this study, we set out to examine the market orientation—performance relationship in the context of exporters' foreign market activities. Specifically, we focus on whether the relationship between EMO behavior and export performance is linear or non-linear. We also explore whether the nature of this non-linear relationship depends on market dynamism and/or the exporter's degree of internationalization. Our findings have clear implications for managers and strategy researchers.

First, for managers, our results indicate that EMO behavior is positively related to export sales success only at lower levels of EMO behavior. Firms with very low EMO behavior levels can probably gain much by continuing to invest in the firm's EMO behavior levels; firms with very high levels of EMO behavior, however, may have gone beyond some sweet spot and may well be on the down-slope (i.e., have EMO behavior levels that are above some optimal value in terms of export sales success). These latter firms may need to re-channel resources away from EMO behavior development and maintenance into new ways of providing customers with value (e.g.,

investing in developing greater technological orientation, and other market driving approaches).

The task for managers, then, is to try to manage the firm's EMO behavior level such that the firm is operating at, or near to, the sweet spot.

Second, increased market dynamism means that EMO behavior becomes a more potent driver of export sales success. For firms that are operating sub-optimally and are on the up-slope (i.e., have EMO behavior levels that are *below* some optimal value in terms of export sales success), then a unit increase in EMO behavior will lead to a proportionally greater increase in performance the greater is the market dynamism. So, firms that are operating sub-optimally in more dynamic markets will typically experience greater performance gains by increasing EMO behavior, compared to identical firms operating in less dynamic markets. Clearly, it is critical for managers to determine whether their business is on the up-slope or down-slope: for firms operating in more dynamic markets, the performance consequences of moving closer to the sweet spot could be dramatic.

Third, the observation that the sweet spot occurs at increasingly lower values of EMO behavior as market dynamism increases means that managers need to be very careful as dynamism accelerates in their markets. As Slater and Narver (1994) point out, market conditions are transient, and in the long run, all markets experience changing buyer preferences and higher levels of market dynamism at some stage. Accordingly, if firms are experiencing increased levels of market dynamism, and if they were previously operating at an optimal EMO behavior level, then the manager's task is to decrease the firm's EMO behavior levels to *maintain* the firm's position at the sweet spot, or the firm will find that is operating sub-optimally, on the down-slope. Certainly, identifying and managing the firm to achieve an optimal level of EMO behavior is not a one-off job.

Fourth, increased internationalization brings with it increased information processing demands, and more complex business environments (e.g., Contractor 2007; Hennart 2007; Kafouros et al. 2008; McDougall and Oviatt 1996). Our findings indicate that the optimal level of EMO behavior *increases* in magnitude as the firm's degree of internationalization increases. The implication is clear for managers whose task is to ensure that their firms' EMO behavior levels remain near the sweet spot: exporters pursuing strategies that entail greater international involvement must simultaneously increase their firms' EMO behavior levels to achieve optimal performance.

Our study findings are also relevant to researchers. First, this study develops fresh insights into the determinants and moderators of export performance. Our efforts allow us to show that EMO behavior's relationship with export success is rather complex, and that it operates in non-linear ways, and through various moderated relationships. As a result, this study contributes to a greater understanding of the determinants of export performance, as well as contributing to a better understanding of how EMO behavior operates on performance.

With regards to the latter relationship, the study also explains how a contingency-based view of EMO behavior can be used successfully to model EMO behavior's performance consequences. Our modeling efforts indicate that EMO behavior is positively related to export success some of the time, depending on the internal (strategy) and external (environmental) factors facing firms. In this respect, the resource-based view of the firm, when combined with a contingency-based view of EMO behavior, was quite successful in helping us identify the conditions under which EMO behavior would be positively and negatively related to export success.

Finally, our study has ramifications for market orientation theory in general. This is the first empirical study we are aware of that demonstrates that factors specific to international business

strategy (degree of internationalization) play a role in determining how market orientation shapes business success. In other words, we show that market-oriented behavior's nomological network of relationships with other constructs (such as business success), are not context free: the context in which the construct is modeled can have an influence on how the construct shapes performance. It would not make sense to include degree of internationalization in a model of market-oriented behavior and business performance unless the firm is actively involved in international business.

There may be additional contexts in which context-specific models would provide an improvement on traditional non-context-specific models of market orientation's consequences. For instance, in joint ventures (JVs), market-oriented behavior might include activity across a broad JV system (e.g., parents and child may be involved in intelligence generation, dissemination and response). The effectiveness of system-wide market-oriented activity may depend on factors such as inter-parent conflict, JV autonomy, strategic alignment, and so on. Thus, non-traditional organizational forms may need their own theory of how market orientation shapes business success.

LIMITATIONS AND FUTURE RESEARCH

Our study is not without potential limitations. First, we use cross-sectional data from a single source within exporting firms. Problems arising from this kind of data (various response biases) are minimized when the study constructs are relatively concrete, the study topic is not sensitive and susceptible to socially desirable responses, and the measurement formats and scales used in the study are heterogeneous (Rindfleisch et al. 2008). Our study meets these requirements. Nevertheless, it would be informative to reassess our model using data obtained from multiple sources. However, in their review of the export performance literature, Sousa, Martínez-López and Coelho (2008) uncover no studies that collect information from more than one informant in the same firm. They

attribute this to the fact that in export performance studies, the information sought is often unique to the export function, so much so that very few people have access to the relevant data. As a result, the use of single informants is often driven by pragmatism by the researcher.

Accordingly, Sousa, Martínez-López and Coelho (2008, p. 349) warn against the use of multiple informants for the sake of it: “the use of single informants is appropriate where they, and they alone, have unique access to the information being sought, or where they are likely to provide more accurate information (because of either knowledge or reduced bias)... generating information from multiple informants on export marketing issues may lead to the generation of data from individuals who are not very knowledgeable about the firm’s export operations, and thereby decrease the accuracy of the information provided.” We concur with this reasoning, and conclude that while the idea of utilizing multiple respondents is appealing, the reality must be carefully planned and implemented so that the use of multiple informants does not lead to the collection of invalid data.

Our study uses data collected only from Finland, which has a relatively small domestic market, but numerous large and relatively easy to access foreign markets within close proximity (e.g., European markets, Russia). It may be worthwhile reassessing our model in countries that are geographically remote from their potential export market base (e.g., New Zealand), countries that have very large domestic markets, where exporting is less of a strategic imperative (e.g., USA), or countries that are culturally very different from Finland (e.g., Asian countries).

It is also the case that our empirical tests focus on the export sales performance consequences of EMO behavior. Future researchers should investigate whether EMO behavior has similar effects on other important performance measures (e.g., export profits). In this respect, it would be beneficial if researchers can obtain objective export performance data.⁴ Likewise, our model contains a single

measure of environmental turbulence – market dynamism. Future research should assess the role that other aspects of the environment (e.g., competitive intensity) may play in this respect.

We also draw no distinction between firms whose only international involvement is exporting, and between firms that might also engage in other forms of international operation (e.g., international JVs, foreign manufacturing via manufacturing subsidiaries). Accordingly, our study findings are of direct relevance only to firms' export marketing activities and their export success, and cannot be generalized beyond this. For other forms of international engagement, it may be that a different theory of market orientation's role in shaping success is required. For example, when multinational enterprises (MNEs) engage in equity-based international JVs, the consequences of being market-oriented need to be considered both in terms of the venture itself, and for the parent companies (e.g., market-oriented information sharing in international JVs may affect the parent firms' dissemination risk). Likewise, there may be trade-offs between the benefits accruing from differentially investing resources in market-oriented activity in export operations vis a vis, say, investing them in developing market-oriented activity in wholly-owned foreign sales and manufacturing subsidiaries. Similarly, exporters may find that they may need to carefully balance their investments in the development of upstream market orientation (supplier market orientation) and downstream market orientation (export customer orientation) (see Langerak 2001; Min et al. 2007).

Finally, it will be productive for researchers to examine the investments firms make in multiple orientations (not just EMO behavior). This way, it may be possible to study trade offs between different orientations, and identify optimal investment patterns. Accordingly, it can be seen that there are many opportunities and challenges in terms of developing a greater understanding of the consequences of market-oriented behavior in exporting firms.

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ENDNOTES

1. We confine our interest to exporting firms and their export success. As a reviewer pointed out, our study does not explicitly investigate global marketing strategies or strategies that multinational enterprises may pursue (e.g., setting up joint ventures and foreign manufacturing subsidiaries).
2. Degree of internationalization is a different kind of contingency from market dynamism. High market dynamism refers to unpredictability and market uncertainty, where customers' needs and wants are changing rapidly and continuously, and where sources of superior value for customers are emerging and disappearing quickly (Jaworski and Kohli 1993). High degrees of internationalization, however, imply complexity (McDougall and Oviatt 1996), but do not necessarily imply uncertainty.
3. Our response rate is in line with several previous market orientation studies. For example, Narver and Slater (1990) report a response rate of 84%, while Jaworski and Kohli (1993) report a response rate of 79.6%. That said, our response rate is high relative to many published market orientation studies (e.g., Cadogan, Diamantopoulos and Siguaw (2002) report a response rate of between 22% and 34%; Murray et al. (2007) report a response rate of 37%). Over and above the fact that business response rates to mail surveys tend to be quite high in Finland, where the mail survey burden is still relatively low, we attribute our high response numbers to the effort we put into questionnaire design and administration. The questionnaire underwent several rounds of protocols and mail pretests to ensure that the instrument and covering letter were worded and framed in an appealing way, and we undertook repeated contact with the sample to generate and maintain interest in the study.
4. Katsikeas, Leonidou and Morgan (2000) warn that care must be taken when trying to generate objective export performance data. For instance, it may be unfeasible to collect objective export profit data, since many firms do not distinguish between domestic and export business operations in their financial statements and reports. Additionally, the data obtained may not be comparable across firms. Different accounting standards and procedures can affect the way that profits are reported and allocated, potentially compromising the validity of the study.

TABLE 1
MODEL FIT MEASURES, CORRELATION MATRIX AND SCALE PROPERTIES

Model	χ^2 (d.f.)	$\Delta\chi^2$ (Δ df)	RMSEA	CFI	NNFI			
Measurement model	643.50 (220)	–	.050	.97	.97			
Method bias model	4637.10 (234)	3993.6 ^a (14)	.155	.76	.75			
<i>Structural models</i>								
Model 1 (Constrained Model) ^c	107.86 (43)	–	.044	.97	.93			
Model 2 (Unconstrained Model) ^d	92.93 (35)	15.53 ^b (8)	.046	.97	.96			
		1.	2.	3.	4.	5.	6.	7.
1. Generation	–							
2. Dissemination	.46	–						
3. Responsiveness	.53	.41	–					
4. EMO behavior ^e	.82	.79	.79	–				
5. Market dynamism	.17	.02	.10	.12	–			
6. Degree of internationalization	.32	.13	.25	.28	.03	–		
7. Sales performance	.33	.29	.31	.38	-.01	.34	–	
Mean	5.12	5.22	5.27	5.21	4.30	0.00 ^g	6.30	
Standard deviation	1.09	1.14	1.03	.87	1.17	.86	1.59	
Composite reliability	.84	.83	.79	na ^f	.79	na ^f	.81	
Average variance extracted	.51	.50	.49	na ^f	.44	na ^f	.52	

RMSEA = root mean square error of approximation; CFI = Comparative Fit Index; NNFI = Non-Normed Fit Index

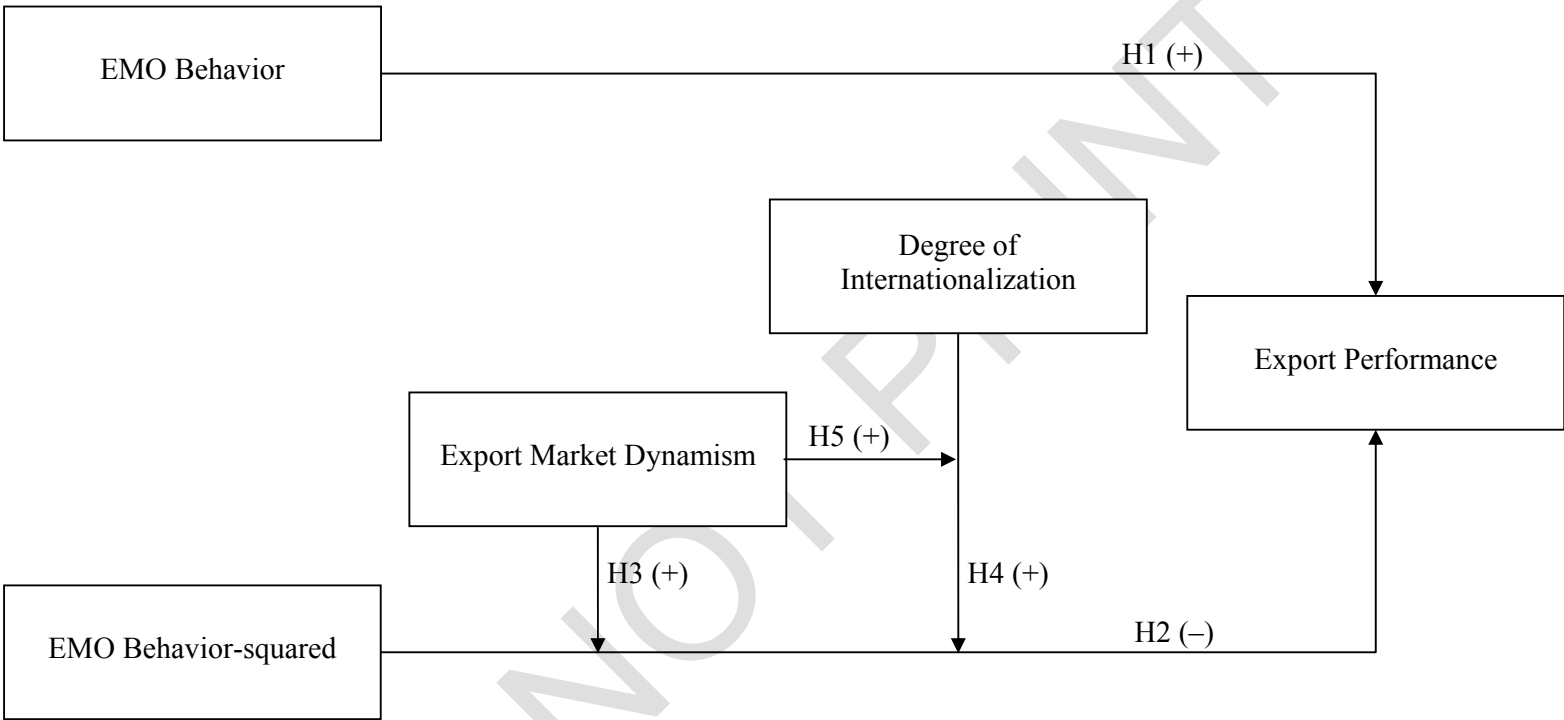
- a Relative to the Measurement model, the Method Bias model shows a significant deterioration (increase) in Chi-square at 5%.
- b: Relative to Model 1 (constrained model), Model 2 shows a significant improvement (decrease) in Chi-square at 5%.
- c: Squared multiple correlation coefficient = .25.
- d: Squared multiple correlation coefficient = .27.
- na Formative measure: composite reliability and average variance extracted are not meaningful in this case.
- e EMO behavior score is average for export information generation, dissemination and responsiveness scores.
- f Neither composite reliability nor average variance extracted are applicable for this measure.
- g Degree of internationalization is an index created by averaging three standardized variables (see Appendix for details), and has a mean value of zero. As a result, firms with lower levels of internationalization return values below 0, and those with higher levels of internationalization return values above 0.

TABLE 2
MODEL PATH COEFFICIENTS AND T-VALUES

<i>Hypotheses Supported By Path</i>		Parameter estimates and t-values ^a		
		Unstandardized estimates	Standardized estimates	t-values
H1	EMO behavior	.68	.33	8.87
H2	EMO behavior-squared	.03	.02	.53
H2, H3	EMO behavior-squared × market dynamism	-.15	-.12	-2.96
H2, H4	EMO behavior-squared × degree of internationalization	-.11	-.05	-1.44
H2, H3, H4, H5	EMO behavior-squared × degree of internationalization × market dynamism	-.02	-.01	-.32
<i>Controls</i>				
	Market dynamism	-.10	-.06	-1.85
	Degree of internationalization	.62	.30	8.03
	EMO behavior × market dynamism	-.01	-.01	-.16
	EMO behavior × degree of internationalization	-.08	-.03	-.83
	Degree of internationalization × market dynamism	-.06	-.03	-.89
	EMO behavior × degree of internationalization × market dynamism	.25	.13	3.10

a: Critical t-value (5%, one-tailed) = 1.645

FIGURE 1
CONCEPTUAL MODEL



APPENDIX
MEASUREMENT ITEMS USED FOR MODEL TESTING

Export Market-Oriented Behavior

(7-point scales with very strongly disagree/very strongly agree anchors)

Export Market Intelligence Generation

1. In this company, we generate a lot of information concerning trends (e.g., regulations, technological developments, political, economic) in our export markets.
2. We constantly monitor our level of commitment and orientation to serving export customer needs.
3. We are slow to detect fundamental shifts in our export environment (e.g., regulation, technology, economy). R
4. We periodically review the likely effect of changes in our export environment (e.g., regulation, technology).
5. We generate a lot of information in order to understand the forces which influence our overseas customers' needs and preferences.

Export Market Intelligence Dissemination

1. Too much information concerning our export competitors is discarded before it reaches decision makers. R
2. Information which can influence the way we serve our export customers takes forever to reach export personnel. R
3. Important information about our export customers is often 'lost in the system'. R
4. Information about our export competitors' activities often reaches relevant personnel too late to be of any use. R
5. Important information concerning export market trends (regulation, technology) is often discarded as it makes its way along the communication chain. R

Export Market Responsiveness

1. Our export business strategies are driven by our beliefs about how we can create greater value for export customers.
2. Our export strategy for competitive advantage is based on our understanding of export customer needs.
3. Our export business objectives are driven primarily by customer satisfaction.
4. We give close attention to after-sales service in our export markets.

Export Market Dynamism

(7-point scales with not at all / to an extreme extent anchors)

1. Our export customers' product preferences change quite a bit over time.
2. New export customers tend to have product-related needs that are different from those of our existing export customers.
3. Our export customers tend to look for new products all the time.
4. Our export customers tend to have stable product preferences. R
5. We are witnessing changes in the type of products/services demanded by our export customers.

Export Sales Performance

1. Satisfaction with export sales volume during the past 3 years.^A
2. Satisfaction with export market share during the past 3 years.^A
3. Satisfaction with export market entry during the past 3 years.^A
4. Average annual sales growth compared to industry average.^B

A: 10-point scale with very dissatisfied / very satisfied anchors

B: 10-point scale with poor / outstanding anchors

Degree of Internationalization

1. Percentage of total sales turnover derived from exports.
2. Number of export destination countries.
3. Which of the following regions the firm exports to (Western Europe (including Scandinavia), Russia and Baltic countries, Asia, Eastern Europe, North America, Africa and Middle East, South/Central America).

R: reverse coded.

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