Internal and external drivers of green export business strategy: Their impact on competitive advantage and performance

Abstract
With the intensification of problems relating to the environment, exporting firms are increasingly confronted with ecologically conscious consumers and stricter environmental laws in many countries. The paper presents the results of a study conducted among 216 Greek exporters of manufactured goods, focusing on the internal and external drivers of an eco-friendly exporting business strategy, and its resulting effects on competitive advantage and performance. Our findings confirmed the instrumental role of environmental public concern, competitive intensity, organizational culture, and management profile on an eco-friendly export business strategy. The latter was found to have a positive effect on the firm’s product differentiation competitive advantage, although there was no impact on cost leadership advantage. The product differentiation advantage was in turn revealed to be positively associated with both export market performance and export financial performance. However, such association with performance was not established in the case of cost leadership advantage.

Keywords
Exporting; Environmental management; Business strategy; Business performance
Introduction
The rapid pace of technological growth in recent decades has been responsible for causing serious ecological problems (e.g., climatic changes, land degradation, water pollution), which has given rise to environmental public concern in many parts of the world (Baker & Sinkula, 2005). This has been responsible for pushing many firms to become more sensitive on ‘green’ issues and adjust their business strategies accordingly (Drumwright, 1994; Kirkpatrick, 1990; Polonsky & Rosenberger, 2001). The importance of this topic has attracted a lot of attention from practitioners and academics alike, with hundreds of studies conducted on the subject in the last decades (Leonidou & Leonidou, 2011). Although the bulk of this research took place among domestic firms, virtually no study examines ecological business issues from an exporter’s perspective. However, this is imperative nowadays, not only because of the increasing regulations protecting the environment in various countries, but also due to the rising role of ecologically sensitive market segments (both developed and developing).

The present paper comes to fill this void in the literature by conceptualizing and testing a model of the drivers (internal and external) of an eco-friendly business strategy, and its resulting effects on competitive advantage and performance. Specifically, our study seeks to provide answers to the following questions: (a) How can external and internal factors drive firms to adopt an eco-friendly export business strategy? (b) What role is played by the use of this eco-friendly strategy in gaining a product differentiation or cost leadership competitive advantage in export markets? (c) What are the effects of possessing these types of competitive advantage on both export market performance and export financial performance? The remainder of the paper is organised as follows: In the following section, we review the pertinent literature on environmentally-based business strategy and performance. The conceptual framework of the study is then explained and the research hypotheses are formulated. The next section deals with the investigation method, followed by an analysis of the results relating to the testing of hypotheses. Finally, conclusions and implications are derived, and suggestions for further research made.

Previous research
Although the idea of introducing environmental issues into designing and implementing sound strategies is not new (e.g., El-Ansary, 1974; Henion, 1972; Kassarjian, 1971), only recently has this idea shifted into mainstream management consciousness and attracted the attention of scholars in the field. Four major streams of research are connected with this strategic approach to ecological issues (Leonidou & Leonidou, 2011). The first stream investigates the role of various external factors that necessitate the adoption of eco-friendly strategies, with the imposition of environmental regulations attracting most of the attention, particularly focusing on corporate reaction/pro-action toward environmental legislation (Gray-Lee et al., 1994; Rugman & Verbeke, 1998). Another important issue covered in this category is green standards, with major themes centering on procedures in achieving environmental standards (Jiang & Bansal, 2003) and environmental certification effectiveness (Dowell et al., 2000). Another key external determinant is the environmental movement, with most of the attention given to consumerism, environmentalism, and environmental boycotting (Mirvis, 1994).

The second venue of research focuses on internal determinants of strategy, with the most commonly studied being: adjusting planning and control systems to take into account the risks relating to the adoption of environmental initiatives (Hunt & Auster, 1990), greening the organisational culture (Banerjee, 2002; Menguc & Ozanne, 2005), applying environmental thinking across all organisational layers (Bansal, 2003; Judge & Elenkov, 2005), and pioneering
environmental practices (Egri & Herman, 2000). A few articles (e.g., Fineman, 1996; Egri & Herman, 2000) also dealt with the profile of the green manager, particularly focusing on his/her moral positions, leadership styles, and personal values/attitudes.

The third research stream concerns environmental corporate strategy per se. Of the elements of corporate strategy, production operations attracted most of the attention, covering such themes as environmental production technologies (Klassen & Whybark, 1999), green/lean production (King & Lenox, 2001), and pollution/waste reduction (King and Lenox, 2002). Marketing, as part of the overall corporate strategy, was also widely examined, mainly covering antecedents and consequences of environmentally-oriented marketing strategies (Menon & Menon, 1997; Baker & Sinkula, 2005). Financial aspects of strategy were examined less frequently, with the emphasis being primarily on the link between corporate social/environmental and financial performance (Orlitzky, 2001; Curcio & Wolf, 1996). Other strategic elements examined referred to supply chain management (Mendleson & Polonsky, 1995) and green alliances (Chen, 2001).

The fourth line of research covers environmental strategy implications, with the thrust placed on the performance outcomes of environmental strategies, particularly focusing on the association between environmental and financial performance, and the financial success derived from ecologically-friendly actions (Porter & Van der Linde, 1995; Klassen & McLaughlin, 1996). Another issue investigated less extensively was the environmentally-driven competitive advantage, which is built upon the effective and efficient deployment of environmentally-related resources and capabilities (Russo & Fouts, 1997; Aragon-Correa & Sharma, 2003). A final issue refers to environmental benchmarking/best practices, providing guidelines to successfully implementing corporate environmental policies (Grove et al., 1996; Hart, 1997).

Theoretical background, research model, and hypotheses

Figure 1 presents the conceptual framework of the study, which consists of four major parts: drivers (i.e., public concern, competitive intensity, organizational culture, management sensitivity), eco-friendly business strategy (i.e., marketing, research and development, production, human resources, purchasing, finance), competitive advantage (i.e., product differentiation, cost leadership), and outcome (i.e., market performance, financial performance). Altogether, ten hypothesized associations between the constructs of the model were identified, which are explained in the following.

Figure 1: The conceptual model
External drivers and eco-friendly business strategy: Public concern about the environment stimulates firms to become more ecologically conscious, since they wish to stress their socially responsible behavior to various stakeholders (e.g., investors), as well as to attract customers who are environmentally responsible (Banerjee et al., 2003). In fact, it was confirmed that in countries with a high level of public concern, such as Sweden, the cultivation of eco-friendly business strategies among firms is more widespread (Cagatay & Mihci, 2003). In brief, the existence of public concern about environmental issues in the foreign market will have a positive effect on the firm’s eco-friendly export business strategy (H1). Competitive intensity refers to the degree to which a firm faces competition in a specific product-market (Jaworski & Kohli, 1993). In foreign markets characterized by intense competition, customers have many alternative options to satisfy their needs and wants and can easily switch suppliers. Firms are therefore being forced to find ways to develop strategies that satisfy the needs and wants of customers better than the competition, and environmentally-friendly strategies offer such an alternative. Hence, the existence of competitive intensity in the foreign market will have a positive effect on the firm’s export business strategy (H2).

Internal factors and environmental orientation: Organizational culture (i.e., the set of values and norms shared by the members of the firm) can affect the nature and scope of its environmentally responsible behavior (Menon & Menon 1997). In fact, evidence shows that in organizations whose people are characterized by ecological consciousness, eco-friendly strategies, such as maintaining specialized personnel, adopting green production practices, and implementing green marketing programs, are more likely to be adopted (Baker & Sinkula, 2005). Thus, the existence of an organizational culture which is sensitive to environmental issues will have a positive effect on the firm’s eco-friendly export business strategy (H3). Management sensitivity to environmental issues is also a key factor in crafting an eco-friendly business strategy (Drumright, 1994). This is because managers are the embodiment of the objectives and ideas of the firm and, as such, have a crucial role to play in shaping environmental policies, strategies and procedures within the organization (Stone & Wakefield, 2000). Thus, we posit that: the existence of export managers who are sensitive to environmental issues will have a positive effect on the firm’s eco-friendly export business strategy (H4).

Eco-based strategy, competitive advantage, and performance: One of the key reasons tempting managers to adopt an eco-friendly stance in their strategies is that they can achieve positional competitive advantage. This is because such strategy significantly lowers costs in the long run and/or helps differentiate products from the competition (Porter & van der Linde, 1995). This occurs because, on the one hand, firms use cheaper recyclable supplies and materials, energy-saving processes, waste-minimization solutions and process improvements, and, on the other, they are in a better position to attract, satisfy, and retain environmentally sensitive consumers (Banerjee et al., 2003). In other words, the adoption of an eco-friendly export business strategy will create a competitive advantage for the firm, which may take the form of product differentiation (H5a) and/or cost leadership (H5b). Ultimately, by properly exploiting its eco-friendly competitive advantage, whether product differentiation or cost leadership, the firm is expected, on the one hand, to better perform in the market (e.g., satisfy eco-friendly consumers, strengthen customer loyalty, and attract new customers), and, on the other, to improve its financial performance (e.g., sales, profitability, cash flow) (Bharadwaj et al., 1993; Carmona-Moreno et al., 2004). Hence, the firm’s capitalisation on product differentiation competitive advantage will improve both its market performance (H6a) and financial performance (H6b), and the firm’s exploitation of its cost leadership advantage will improve both its market performance (H7a) and financial performance (H7b).
**Investigation method**

The study was conducted among 216 export manufacturers, who were extracted from a sample of 500 firms registered in the most recent Directory of Greek Exporters (ICAP, 2010), that is, a response rate of 43%. All firms were contacted by telephone and asked to participate in the study and specify key informants who would be qualified to answer the questionnaire. A non-response test, which compared respondents and non-respondents revealed no statistically significant differences.

The research tool was a structured questionnaire, consisting of four major parts, each reflecting the four components of the conceptual model. There was also another section referring to the demographics of the respondent, as well as other background information. All questions were measured on a 7-point Likert scale, anchored from 1 = strongly disagree to 7 = strongly agree. To secure linguistic consistency of the questionnaire, it was written in English and then back-translated into Greek. The scales of the constructs employed and the literature sources from which these were derived are shown in **Appendix 1**.

Data were systematically collected from respondents based on a mail survey, while in some cases, personal interviews or drop-in questionnaires were also employed. Key informants were individuals who were directly responsible for the firm’s export business strategy, these usually being the export officer, marketing manager, and in some cases the general manager. To test the conceptual model proposed, structural equation modeling was adopted (based on the EQS program), because it provides a useful framework for managing multiple relationships among constructs simultaneously (Hair *et al.*, 2006).

**Findings and discussion**

To assess the validity and reliability of the constructs and scales used in the conceptual model, two measurement models were estimated. The first (Model A) was used to assess the external factors (i.e., environmental public concern and competition intensity) and the internal factors (i.e., organisational culture and management profile). The second (Model B) included constructs such as eco-friendly export business strategy, competitive advantage, export market performance, and export financial performance. The results of both models provided a very good fit and the factors loaded highly on the specified constructs (see **Appendix 2**). *Convergent validity* was satisfactory, since *t*-values for each item was greater than 4.0, standardised loadings were above .5, and all standard errors of the estimated coefficients were very low. *Discriminant validity* was also evident, since the confidence interval around the correlation estimate for each pair of constructs examined never included 1.0, and the chi-square difference between constrained and unconstrained models for every pair of inter-correlated constructs was always significant ($\Delta \chi^2 (1) > 3.84; p < .05$) (Anderson & Gerbing, 1988). All factors had *composite reliability* values and Cronbach’s alpha estimates greater than .70, implying a reliable measurement of the theoretical construct as an element of the structural model (Bagozzi & Yi, 1988). The presence of a common method bias in the outcomes of the analysis was checked through a confirmatory factor analysis, in which all items included in the measurement (and the structural - see below) model were restricted to load on a single factor (Venkatraman, 1990).

The hypothesised links between the constructs were tested using the structural model, based on an elliptical re-weighted least squares (ERLS) estimation procedure. The analysis revealed a satisfactory structural equation model fit, as demonstrated by the ratio of Chi-square by the degrees of freedom ($\chi^2/df$) = 1.92 and the results of the alternative fit indices (NFI = .92, NNFI = .96, CFI = .96, RMSEA = .082). The standardised path coefficients, together with the corresponding *t*-values of the structural model, are presented in **Appendix 3**. Notably, with the
exception of H$_{5b}$, H$_{7a}$ and H$_{7b}$, the hypotheses examined were found to be statistically significant and in the right direction.

The findings regarding the external drivers show that the level of public concern for the environment in the foreign market is conducive toward the cultivation of an eco-friendly export business strategy ($\beta$ = .35, $t$ = 3.66, $p$ = .00), and the same was also true with regard to the effect of competitive intensity on this strategy ($\beta$ = .23, $t$ = 1.82, $p$ = .09). The findings provide strong support for the argument that environmentally sensitive organizational culture ($\beta$ = .79, $t$ = 7.23, $p$ = .00) and managerial profile ($\beta$ = .32, $t$ = 4.57, $p$ = .00) provide the impetus for a firm to develop an eco-friendly export business strategy. Although adopting an environmentally friendly stance in export business strategy was found to enhance a competitive advantage which is based on product differentiation ($\beta$ = .63, $t$ = 6.16, $p$ = .00), this strategy did not have an effect on cost leadership competitive advantage ($\beta$ = .09, $t$ = .93, $p$ = .35). This may be due to the significant costs incurred in making the firm’s business strategy more environmentally friendly (Klassen & Whybark, 1999; Christmann, 2000). In line with prior research, our study confirmed that a differentiated product advantage has a favourable effect on both export market performance ($\beta$ = .24, $t$ = 2.38, $p$ = .01) and export financial performance ($\beta$ = .37, $t$ = 3.50, $p$ = .00). However, the path linking cost leadership competitive advantage with either export market performance ($\beta$ = .06, $t$ = .58, $p$ = .56) or export financial performance ($\beta$ = .10, $t$ = 1.03, $p$ = .30) was not confirmed.

**Conclusions, implications, and directions**

Our study has stressed the role of both external and internal forces in sensitising exporting firms toward having a business strategy more friendly to the environment when operating in foreign markets. The adoption of such an eco-friendly strategy is very likely to enhance its competitive advantage in terms of product differentiation rather than cost leadership. By capitalising on an ecologically-based product differentiation advantage, the exporting firm will be in a position to improve both its market performance and financial performance. However, an attempt to pursue a cost leadership advantage will have no positive effect on either market or financial performance, probably due to the high investments and costs involved in adjusting the firm’s business strategy to conform to environmental concerns.

These findings have various implications for both business managers and public policymakers. Export managers should appreciate the crucial role of eco-friendly business strategies in gaining a competitive advantage of product differentiation (because this will significantly improve their performance in foreign markets) and for this reason should carefully cultivate an appropriate organizational culture and managerial spirit. On the other hand, policymakers should try, through proper educational, regulatory, communication, and other programs, to cultivate the realisation among exporters that adopting an environmental approach to their business will be beneficial, especially in the long term, by enhancing their presence in foreign markets and improving their financial performance.

The importance of our findings at both micro-business and macro-economic levels necessitates the replication of the study in other countries, with different economic, socio-cultural, and political-legal settings. It would also be interesting to examine the moderating effect of cultural distance from and economic development of the targeted foreign market on the link between eco-friendly business strategy and competitive advantage. The effect of industry type and market orientation on the environmental behavior of exporters also warrants investigation. Finally, to identify the long-term effects of the implementation of eco-friendly business strategies, it is important to embark on longitudinal research.
References


Marketing, 57 (3), 53-70.
### Appendix 1: Operationalization of constructs

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Item</th>
<th>Item description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign</td>
<td>EPC1</td>
<td>The public in the foreign market expresses its concerns for damaging the environment</td>
</tr>
<tr>
<td>Country</td>
<td>EPC2</td>
<td>The customers in the foreign market increasingly demand eco-friendly products</td>
</tr>
<tr>
<td>Environmental</td>
<td>EPC3</td>
<td>The public in the foreign markets expresses more concern for issues other than environmental (R)</td>
</tr>
<tr>
<td>Public Concern</td>
<td>EPC4</td>
<td>The customers in the foreign market expect our company to be environmentally sensitive</td>
</tr>
<tr>
<td>Foreign</td>
<td>CIN1</td>
<td>The level of competition in our industry is fierce</td>
</tr>
<tr>
<td>Country</td>
<td>CIN2</td>
<td>There are many wars (e.g., price emphasis) between companies in our industry</td>
</tr>
<tr>
<td>Competition</td>
<td>CIN3</td>
<td>In our industry, whatever can be offered by a competitor, can be immediately offset by another</td>
</tr>
<tr>
<td>Intensity</td>
<td>CIN4</td>
<td>In our industry, the competition is a very important characteristic in our industry</td>
</tr>
<tr>
<td>Intensity</td>
<td>CIN5</td>
<td>In our industry, somebody can hear about a new movement among competitors almost every day</td>
</tr>
<tr>
<td>Export</td>
<td>OCR1</td>
<td>In our firm, there is cooperation between departments to cultivate environmental consciousness</td>
</tr>
<tr>
<td>Organizational</td>
<td>OCR2</td>
<td>In all functional areas in our firm, we have incorporated environmental issues</td>
</tr>
<tr>
<td>Green Culture</td>
<td>OCR3</td>
<td>Environmental issues are always taken into account when we discuss our export strategic plans</td>
</tr>
<tr>
<td>Green Culture</td>
<td>OCR4</td>
<td>In our firm, the people dealing with exports are encouraged to express their ideas on green issues</td>
</tr>
<tr>
<td>Export</td>
<td>OCR5</td>
<td>In our firm, there is a favorable climate in which green issues can be freely discussed</td>
</tr>
<tr>
<td>Management</td>
<td>MRP1</td>
<td>Our managers keep us away from the risks involved in relation to ecological issues (R)</td>
</tr>
<tr>
<td>Management</td>
<td>MRP2</td>
<td>Our managers pay attention to ecological issues</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>MRP3</td>
<td>In our company, export managers have clear instructions to implement environmental goals</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>MRP4</td>
<td>Our company has managers who understand issues of ecological development in foreign markets</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>MRP5</td>
<td>Our export managers make sure that our equipment is well-maintained and operated in an eco-friendly way</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>MRP6</td>
<td>Our export managers put a lot of effort in understanding the green aspects of our activities</td>
</tr>
<tr>
<td>Marketing</td>
<td>CSM1</td>
<td>We design and develop products for the foreign market that are environmentally friendly</td>
</tr>
<tr>
<td>Marketing</td>
<td>CSM2</td>
<td>We encourage our foreign customers to engage in eco-friendly activities by offering price incentives</td>
</tr>
<tr>
<td>Marketing</td>
<td>CSM3</td>
<td>We collaborate with channels of distribution in the foreign market that are geared toward protecting the environment</td>
</tr>
<tr>
<td>Marketing</td>
<td>CSM4</td>
<td>Our company makes sure that the logistics used in selling goods to the foreign market are environmentally responsible</td>
</tr>
<tr>
<td>Marketing</td>
<td>CSM5</td>
<td>Our promotional efforts in the foreign market try to communicate our commitment to protect the environment</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>CSR1</td>
<td>Our company invests in the development of cleaner products and technologies for foreign markets</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>CSR2</td>
<td>We take into account the protection of the environment when developing new technologies for foreign products</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>CSR3</td>
<td>We have specialised staff who are engaged in the development of eco-friendly products for abroad</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>CSR4</td>
<td>We systematically request the assistance of external consultants specialising in ecological issues for foreign goods</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>CSR5</td>
<td>We develop collaborations with external organizations for the development of eco-friendly goods for foreign markets</td>
</tr>
<tr>
<td>Production</td>
<td>CSP1</td>
<td>We adopt environmental approaches that guide our production processes for goods sold abroad</td>
</tr>
<tr>
<td>Production</td>
<td>CSP2</td>
<td>We care about the reduction of environmental effects during our production process for goods sold abroad</td>
</tr>
<tr>
<td>Production</td>
<td>CSP3</td>
<td>We use environmental management systems in producing goods for the foreign market</td>
</tr>
<tr>
<td>Production</td>
<td>CSP4</td>
<td>We systematically reduce the use of non-ecological substances in our production process</td>
</tr>
<tr>
<td>Human</td>
<td>CSH1</td>
<td>We educate our employees engaged in exporting on issues relating to the environment</td>
</tr>
<tr>
<td>Resources</td>
<td>CSH2</td>
<td>We seek opportunities to compensate our employees who are adopting an ecological stance</td>
</tr>
<tr>
<td>Resources</td>
<td>CSH3</td>
<td>We offer awards to our exporting staff which are related to environmental issues</td>
</tr>
<tr>
<td>Resources</td>
<td>CSH4</td>
<td>Our company has special award systems that recognize the environmental performance of our exporting staff</td>
</tr>
<tr>
<td>Resources</td>
<td>CSH5</td>
<td>We offer bonus or other forms of financial reward to exporting staff who have achieved their environmental goals</td>
</tr>
<tr>
<td>Purchasing</td>
<td>CSG1</td>
<td>We give priority to the purchase of ecological raw materials for the production of our products for export</td>
</tr>
<tr>
<td>Purchasing</td>
<td>CSG2</td>
<td>We apply environmental approaches in our purchasing decisions for goods relating to exports</td>
</tr>
<tr>
<td>Purchasing</td>
<td>CSG3</td>
<td>We prefer to deal with suppliers who are environmentally friendly when selling goods for the foreign market</td>
</tr>
<tr>
<td>Purchasing</td>
<td>CSG4</td>
<td>We always require from our suppliers specifications that conform to ecological characteristics of the exported goods</td>
</tr>
<tr>
<td>Purchasing</td>
<td>CSG5</td>
<td>Our company collaborates with suppliers that can help to achieve its environmental objectives for foreign markets</td>
</tr>
<tr>
<td>Finance</td>
<td>CSF1</td>
<td>Our financial policy allocates money for environmental purposes relating to the firm’s export activity</td>
</tr>
<tr>
<td>Finance</td>
<td>CSF2</td>
<td>Our company follows established financial standards (e.g., global reporting) in its approach to export markets</td>
</tr>
<tr>
<td>Finance</td>
<td>CSF3</td>
<td>We adopt formal environmental financial policies and processes for our export activities</td>
</tr>
<tr>
<td>Finance</td>
<td>CSF4</td>
<td>Our financial strategy with regard to exports takes into consideration green saving costs</td>
</tr>
<tr>
<td>Finance</td>
<td>CSF5</td>
<td>The financial strategy of our company with regard to exports takes into consideration environmental costs</td>
</tr>
<tr>
<td>Export Product</td>
<td>PDA1</td>
<td>We offer innovative, ecological goods in the foreign market</td>
</tr>
<tr>
<td>Differentiation</td>
<td>PDA2</td>
<td>We offer environmentally friendly products of superior quality in the foreign market</td>
</tr>
<tr>
<td>Competition</td>
<td>PDA3</td>
<td>We offer innovations in our ecological products in the foreign market</td>
</tr>
<tr>
<td>Advantage</td>
<td>PDA4</td>
<td>We offer ecological products with distinctive different characteristics in the foreign market</td>
</tr>
<tr>
<td>Export Cost</td>
<td>CLA1</td>
<td>We offer the lowest cost for exports in our industry</td>
</tr>
<tr>
<td>Leadership</td>
<td>CLA2</td>
<td>In the foreign markets that we operate, we offer the lowest prices</td>
</tr>
<tr>
<td>Advantage</td>
<td>CLA3</td>
<td>In our export operations we give emphasis to cost efficiency</td>
</tr>
<tr>
<td>Advantage</td>
<td>CLA4</td>
<td>In our foreign operations we seek to have high volume to achieve economies of scale</td>
</tr>
<tr>
<td>Export Market Performance</td>
<td>EMP1</td>
<td>Rate of acquiring foreign customers</td>
</tr>
<tr>
<td>Export Market Performance</td>
<td>EMP2</td>
<td>Rate of maintaining foreign customers</td>
</tr>
<tr>
<td>Export Market Performance</td>
<td>EMP3</td>
<td>Rate of sales increase by current foreign customers</td>
</tr>
<tr>
<td>Export Market Performance</td>
<td>EMP4</td>
<td>Foreign customer satisfaction</td>
</tr>
<tr>
<td>Export Market Performance</td>
<td>EMP5</td>
<td>Foreign customer loyalty</td>
</tr>
<tr>
<td>Export Market Performance</td>
<td>EMP6</td>
<td>Reputation of company among foreign buyers</td>
</tr>
<tr>
<td>Export</td>
<td>EFP1</td>
<td>Export profits</td>
</tr>
<tr>
<td>Export</td>
<td>EFP2</td>
<td>Export sales</td>
</tr>
<tr>
<td>Financial Performance</td>
<td>EFP3</td>
<td>Market share in the foreign market</td>
</tr>
<tr>
<td>Financial Performance</td>
<td>EFP4</td>
<td>Export sales intensity</td>
</tr>
<tr>
<td>Financial Performance</td>
<td>EFP5</td>
<td>Return on export-related investment</td>
</tr>
<tr>
<td>Financial Performance</td>
<td>EFP6</td>
<td>Return on export-related capital</td>
</tr>
</tbody>
</table>

Note: Measurement scales were based on a 7-point Likert scale, ranging from 1: Strongly disagree to 7: Strongly agree.
## Appendix 2: Measurement models - Summary of construct measurement

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Scale items</th>
<th>Standardised loadings</th>
<th>t-value</th>
<th>α</th>
<th>ρ</th>
<th>AVE</th>
<th>Mean score</th>
<th>Standard Deviation</th>
<th>Items means</th>
<th>Items s.d.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODEL A</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Country</td>
<td>EPC1</td>
<td>.78</td>
<td>*</td>
<td>.88</td>
<td>.81</td>
<td>.72</td>
<td>4.69</td>
<td>1.35</td>
<td>4.74</td>
<td>1.47</td>
</tr>
<tr>
<td>Environmental Public Concern</td>
<td>EPC2</td>
<td>.94</td>
<td>11.52</td>
<td></td>
<td></td>
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.87
| Export Product Differentiation | PDA1 | .93 | * | .95 | .89 | .84 | 4.38 | 1.53 | 4.38 | 1.62 |
| Export Cost Leadership Advantage | CLA1 | .85 | * | .78 | .72 | .56 | 4.08 | 1.27 | 3.95 | 1.43 |
| Export Market Performance | EMP1 | .51 | * | .91 | .86 | .59 | 5.36 | 0.94 | 4.50 | 1.34 |
| Export Financial Performance | EFP1 | .52 | * | .91 | .86 | .66 | 4.58 | 1.09 | 4.74 | 1.33 |

* Item fixed to set the scale
** Higher-order factor CES with $\alpha = .97$, Mean score = 4.43, Standard Deviation = 1.23

Fit statistics of Model A:
Chi-square ($\chi^2$) = 303.64, $p = .000$; $df = 139$; Ratio Chi-square to $df$ ($\chi^2/df$) = 2.18;
Normed Fit Index (NFI) = .94; Non-Normed Fit Index (NNFI) = .95; Comparative Fit Index (CFI) = .96;
Root Mean Squared Error of Approximation (RMSEA) = .082; 90% Confidence Interval of RMSEA = (.070, .094)

Fit statistics of Model B:
Chi-square ($\chi^2$) = 2245.22, $p = .000$; $df = 1111$; Ratio Chi-square to $df$ ($\chi^2/df$) = 2.02;
Normed Fit Index (NFI) = .91; Non-Normed Fit Index (NNFI) = .95; Comparative Fit Index (CFI) = .95;
Root Mean Squared Error of Approximation (RMSEA) = .087; 90% Confidence Interval of RMSEA = (.082, .092)

Appendix 3: Results of the structural model

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Fit statistics:
Chi-square ($\chi^2$) = 3580.50, $p = .000$; $df = 1867$; Ratio Chi-square to $df$ ($\chi^2/df$) = 1.92;
Normed Fit Index (NFI) = .92; Non-Normed Fit Index (NNFI) = .96; Comparative Fit Index (CFI) = .96;
Root Mean Squared Error of Approximation (RMSEA) = .082; 90% Confidence Interval of RMSEA = (.077, .087)