

EXPORT BARRIERS AND EXPORT PERFORMANCE: EMPIRICAL EVIDENCE FROM THE COMMERCIAL RELATIONSHIP BETWEEN GREECE AND IRAN

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Abstract

The purpose of this paper is to examine the relationship between export barriers and the export performance of Greek firms targeting the Iranian market. Reviewing the literature and using expert opinions, 18 variables were identified. A structured questionnaire was applied to 141 Greek firms and exploratory and confirmatory factor analyses were used to categorize variables in 6 dimensions. Then, a structural equation model was developed to determine which dimension has a greater effect on export performance. This model identifies the operational dimension (0.65), environmental dimension (0.60), financial dimension (0.58), source dimension (0.44), legal dimension (0.35) and logistic dimension (0.27) as effective export barriers to the export performance of Greek firms.

JEL Classification: F14

Keywords: Export, Export Barriers, Export Performance, Iran, Greece

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1. Introduction

Exporting has been the most popular and fastest-growing mode of international market entry, favored especially by small and medium-sized firms, since it doesn't need many resources and is associated with less risk in comparison to other entry modes to foreign markets. Exporting is a crucial business activity for nations' economic health, as it significantly contributes to employment, trade balance, economic growth, and higher standard of living (Lee and Habte-Giorgis, 2004).

The key role of exporting in national economies has resulted in export performance attracting considerable interest in many studies. Most research focuses on the relationships between performance and organizational or environmental factors; less has been done into the specific factors that could hinder exporting. While most research focusing on export performance has been undertaken in the United States and Europe, limited work has been conducted in developing countries. Enhancing export performance is crucial for firms based in developing countries that view the global marketplace as a means to ensure growth, survival or competitiveness (Matanda and Freeman, 2009). So, it is important to identify barriers that threaten the export performance of firms based in developing countries in order to improve their competitiveness in the global market. With regard to the volume of bilateral trade, Iran and Greece are important commercial partners for each other. Trade between Iran and Greece shows significant fluctuations and the trade balance presents a deficit to the detriment of Greece, which is due to large imports of petrochemical products from Iran. Study of the barriers that affect the export performance of Greek firms towards Iran could help managers of Greek's firms to improve the performance of their companies. On the other hand, this study is also innovative in that no published paper has been found that contributed to the problems of Greek firms exporting to the Middle East and Iran.

To achieve its objectives, this paper is organized as follows: The first section presents a theoretical review of export performance and export barriers, especially from outstanding papers published since 2000. This review provides the basis for the formulation of a research framework, which is tested using a sample of 141 Greek firms that have exported their goods to Iran regularly over the last five years. The paper then describes the methodological aspects of the study, and presents the results obtained through explorative and confirmative factorial analysis and Structural equation modeling (SEM), carried out using SPSS and LISREL software. The final section includes the most important conclusions that can be drawn from the results obtained. The work ends with recommendations to policy makers and managers and future lines of research to complete the result of the studies.

2. Literature review

2.1. Export Performance

Export performance is regarded as one of the key indicators of the success of a firm's operations. Research into export performance has grown considerably during the past few decades (Sousa, Martínez-López, and Coelho, 2008; Wheeler, Ibeh, and Dimitratos, 2008). While numerous studies have been conducted to explain export performance and its antecedents, there is no generally accepted conceptualization. Export performance represents the outcome of a firm's activities in export markets (Papadopoulos and Martín Martín, 2010). Export performance can also be defined as the outcomes from the firm's international activities. From this perspective, export performance is the extent to which the firm achieves its objectives when exporting a product to a foreign market (Navarro *et al.*, 2010).

Most researchers accept the multidimensionality of export performance, but there is disagreement about which indicators should be used to measure the variable. Most researchers consider two different dimensions; economic (objective) and strategic (subjective). It is believed that objective and subjective measures are complementary in nature and it is advisable to make use of both in an interrelated way in order to provide a more comprehensive picture of export performance (Stoian, Rialp and Rialp, 2011). This multidimensionality nature of export performance makes it hard to compare and contrast the findings from different studies (Sousa, 2004). In order to provide for a reliable assessment, the development, and subsequently, the validation of measures for different export performance dimensions as well as the use of multiple measures are warranted for capturing the entire story of a firm's export performance (Solberg and Olsson, 2010).

2.2. Export Barriers

Export barriers can be defined as the attitudinal, structural, operational and other constraints that hinder a firm's ability to initiate, develop or sustain international operations (Koksall and Kettaneh, 2011). It is important to achieve a better understanding of export barriers, since these barriers waste the resource of firms and threaten the efficiency and effectiveness of a firm's operations. The negative impact that export barriers can have on medium and small enterprises' internationalization behaviors and activities has attracted the attention of many researchers in international business (Ortega, 2003; Da Silva and Da Rocha, 2001). Studies have employed different perspectives to establish a set of notable barriers, especially with regard to the specific industry or geographical area.

Leonidou's work (2000) is one of the most cited papers that develop a conceptual framework to explain and classify export barriers. He proposed 20 barriers in the field of exporting; existence of keen competition abroad, inability to offer satisfactory

prices, deteriorating of economic conditions abroad, lack of government assistance, limited information to locate and analyze foreign markets, high political risk or instability abroad, perception of high business risks and costs abroad, shortage of working capital, high tariff and non-tariff barriers, inadequate transportation and infrastructural facilities, restrictions imposed by rules and regulations, different customer habits and attitudes, difficulty in locating and obtaining representation, unfavorable foreign exchange rates, different product standards and specifications, inadequate and untrained staff, unfamiliarity of foreign business practice, different cultural traits and language abroad, difficulty in handling documentation and procedures and inability to offer technical after sales service. Using a sample of 100 Cyprus-based exporters, his study categorized these barriers in six groups: corporate resource constraints, environmental differences, export bureaucracy and legislation, government apathy, foreign market entry and operating difficulties and competitive pressures. Then he concluded that problems associated with export competitiveness, including the existence of keen competition abroad and inability to offer satisfactory prices, had the greatest obstructing effect (Leonidou, 2000).

Other notable research done in the last decade is the work of Da Silva and Da Rocha that was published in 2001. They studied 69 exporters from Brazil and indicated that inadequate incentives, strong international competition and exchange rate policies are the most influential obstacles to export activities (Da Silva and Da Rocha, 2001). Ortega's work (2003) on Spanish exporters and non-exporters, involving only small and medium sized enterprises, is the other research that introduced lack of resources, strong foreign competition and lack of export knowledge as export barriers (Ortega, 2003). On the other hand, he believed that export procedures can be a main reason for the initiation of an export activity (Altintas, Tokol, and Harcar, 2007).

The research that was done in Lebanon by Ahmed, Craig, Baalbaki, and Hadadian, is the other study that investigates the problems and difficulties of exporting. These researchers interviewed 61 exporters and non-exporters to identify export barriers. Five factors are highlighted in their study's conclusion: lack of government assistance, competition from firms in overseas markets, pricing and promotion policies, high foreign tariffs and lack of financial capital (Ahmed *et al.*, 2004). Craig and Ahmed repeated the research on export barriers in Australia one year later. They used the interview method as well as their previous research, but only with exporters. This study resulted in two critical factors; export venture management characteristics and adapting to foreign market needs (Craig and Ahmed, 2005). Differences in these two studies are related to the economic condition of the two countries; it is important to note that specific environmental factors such as political and economic conditions can facilitate or impede the exporting. So, testing concepts in different economic, political, cultural, and institutional settings creates the contextual meanings to evaluate the robustness of prevailing theories (Koksall and Kettaneh, 2011).

Altinas, Tokol and Harcar studied export barriers in Turkish firms. They identified 20 factors and classified them in 5 groups: diversity barriers, procedural barriers, internal inefficiency barriers, competition barriers and government barriers. The results of their study indicated that the procedural barriers factor has the most impact on export performance, followed by the competition in foreign market factor. Bureaucracy requirements and competition in overseas markets are the most active factors in export barriers. Competition can be examined in the context of hostile environment perceptions of domestic firms to gain competitive advantage (Altinas *et al.*, 2007). Other studies also show that exporters consider high banking charges, low capacity usage, and poor technology as the major problems that affect their business operations (Owusu-Frimpong and Mmieh, 2007). Research shows that exporters' sensitivity to barriers in the foreign market is determined by managerial perceptions which are in turn influenced by contextual factors associated with firm size, resources and capability, export involvement and international experience (Ortega, 2003; Ojala, 2007; Karelakis, Mattas, and Chryssochoidis, 2008). Mavrogiannis, Bourlakis, Dowson and Ness assessed the export performance of Greek food and beverage exporters. Their study involved a variety of variables and also included trade barriers. They concluded that trade barriers have a negative effect on export performance and Greek exporters should be proactive and innovative to overcome export problems and trade barriers. On the other hand, the role of the government is critical in facilitating export performance. Government policies can assist exporters to overcome trade barriers by providing information about overseas markets and host country partners, and by educating managers to design and implement proper export marketing strategies (Mavrogiannis *et al.*, 2008).

The study of Koksai and Kettaneh – a comparative study of two developing countries, Turkey and Lebanon - employed variables as export barriers in two groups; internal barriers and external barriers. Their study established that the imposition of tariff/non-tariff barriers by host countries negatively affects the performance of firms in both samples, based on export volume and market share. They found that a strong brand image in international markets offers opportunities for capitalizing on economies of scale, developing global markets and helping to establish a firm's visibility and position in the minds of international consumers (Koksai and Kettaneh, 2011). One of the surprising results of this study related to international competition in the target markets, strong international competition positively influencing the performance of Turkish and Lebanese export firms in terms of profitability, since the target market of Turkish and Lebanese firms are geographically and culturally closed.

Kneller and Pisu referred to changes in consumers' preferences, the presence of middlemen and agent representatives, import tariffs, problems finding a trustworthy distributor in the target country, exchange rate fluctuations, risk of losing money in the foreign market, and quality and safety standards as potential export barriers to firms

(Kneller and Pisu, 2011). Their studies confirm that firms face export barriers in the form of imperfect distribution of information between buyers and sellers, which translates into additional costs to obtain basic information about export markets, identifying the first contact point, as well as divergences in culture as key factors acting as export impediments in international trade (Kneller, Pisu and Yu, 2008). Mpinganjira's study in Malawi resulted in classifying 17 export barriers in six main groups. This research referred to the importance of human-related factors as personnel barriers, including insufficient knowledge about export opportunities and lack of personnel knowledgeable in exporting (Mpinganjira, 2011). After analyzing current literature, the considered variables were exposed to experts and finally 18 factors which had high repeatability and frequency in various studies, were identified as the main export barriers. Table 1 indicates these factors along with their contributors.

Table1. Frequently cited export barriers and contributors

| Barriers | Contributors |
|---|---|
| Strong international competition | Leonidou (2000); Da Silva <i>et al.</i> (2001); Ortega (2003); Ahmed <i>et al.</i> (2004); Altintas <i>et al.</i> (2007); Koksai <i>et al.</i> (2011); Mpinganjira (2011) |
| High business risk | Leonidou (2000); Kneller <i>et al.</i> (2011) |
| Different customer culture | Leonidou (2000); Altintas <i>et al.</i> (2007) |
| Required quality standards | Leonidou (2000); Altintas <i>et al.</i> (2007); Mpinganjira (2011); Kneller <i>et al.</i> (2011) |
| Non competitive prices | Leonidou (2000); Ahmed <i>et al.</i> (2004); Altintas <i>et al.</i> (2007); Mpinganjira (2011); Koksai <i>et al.</i> (2011); |
| Limited information about foreign markets | Leonidou (2000); Mpinganjira (2011); Koksai <i>et al.</i> (2011) |
| Unfamiliar foreign business practice | Leonidou (2000); Altintas <i>et al.</i> (2007) |
| Technical & after sales service | Leonidou (2000); Altintas <i>et al.</i> (2007) |
| Insufficient production capacity | Altintas <i>et al.</i> (2007); Owusu-Frimpong <i>et al.</i> (2007); Mpinganjira (2011); Koksai <i>et al.</i> (2011) |
| High tariff and non-tariff barriers | Leonidou (2000); Ahmed <i>et al.</i> (2004); Altintas <i>et al.</i> (2007); Koksai <i>et al.</i> (2011) |
| Unfavorable foreign exchange rates | Leonidou (2000); Da Silva <i>et al.</i> (2001); Kneller <i>et al.</i> (2011) |
| Difficult collection of payments | Altintas <i>et al.</i> (2007); Mpinganjira (2011) |
| Lack of government assistance | Leonidou (2000); Ahmed <i>et al.</i> (2004); Altintas <i>et al.</i> (2007) |
| Restrictive rules and regulation | Leonidou (2000); Mpinganjira (2011) |
| Bureaucratic requirements | Leonidou (2000); Altintas <i>et al.</i> (2007); Mpinganjira (2011) |
| Transportation difficulties | Leonidou (2000); Mpinganjira (2011); Kneller <i>et al.</i> (2011); Koksai <i>et al.</i> (2011) |
| Shortage of working capital | Leonidou (2000); Ahmed <i>et al.</i> (2004); Mpinganjira (2011) |
| Untrained staffs for exporting | Leonidou (2000); Ortega (2003); Altintas <i>et al.</i> (2007); Mpinganjira (2011) |

3. Methodology

3.1. Procedure for data collection

This study aimed to investigate the relationship between export barriers and export performance in the commercial relationship between Greece and Iran. Based on the aim of the study, an empirical analysis was conducted of Greek firms that target Iran as the market for their products. Since the majority of studies about international business and export performance have been conducted in the USA and Europe, there is a need for studies from developing countries to improve their poor export performance. On the other hand, with regard to volume of bilateral trade, Iran is a significant commercial partner for Greece in the Middle East. Trade between Greece and Iran shows significant fluctuations and the trade balance shows a deficit to the detriment of Greece, which is due to large imports of crude oil from Iran. So, Greece and Iran, as two developing countries, were selected for this study.

A structured questionnaire was the main instrument used to collect data. To ensure that the questionnaire's content and design would be unambiguously understood by the respondents, it was pre-tested by 12 experts (Four academic professors in the international business field, four consultants in exporting and international business and four managers of respected exporting firms in Greece and Iran) and the questionnaire was revised in light of their comments. The verbal equivalence between Greek and English was also checked by a bilingual translator to ensure that the questionnaire was easily understandable in Greek culture. For selecting the firms to which the questionnaire was aimed, the database of the Islamic Republic of Iran Customs Administration (IRICA) and Tehran Chamber of Commerce, Industry and Mines (TCCIM) was used to find Greek firms that have exported their goods to Iran regularly, over the last five years (from 2006). Most Greek exported products to Iran are agricultural related products (Crops; Fruits; Oils; Manure; Pesticides) and health and beauty products. The questionnaire was then mailed to managers of these firms. Of the 300 questionnaires dispatched, 141 usable responses were received, representing an effective response rate of 47%. Statistical analyses were done in two phases; first an explanatory factor analysis was performed and then a structural equation model employed to determine which barrier groups have a greater effect on export performance. SPSS 16.0 and LISREL 8.7 were used as statistical software for analyses.

3.2. Variable Measurement

As mentioned in the literature review, export performance is conceptualized as being the result of two dimensions, strategic and economic. In order to measure this construct from an economic perspective, export sales and profitability of export were used. The strategic dimension of export performance was formed by market share and international expansion of firm. Respondents were asked to rate their performance on

these dimensions, in comparison with their main competitors in the Iranian market. 18 factors, as mentioned in table 1, were also used as export barriers on the basis of the literature review.

4. Findings

SPSS 16.0 and LISREL 8.7 were used for statistical analysis to calculate both the factor analysis and the scale reliability analysis. Before carrying out factor analyses, a reliability analysis for the scale was run through Cronbach's alpha. The reliability of the questionnaire was 0.93, which is in the acceptable range. So, scales of this study have a high level of internal consistency and are reliable.

An exploratory factor analysis was first undertaken in order to reduce the data into a few underlying dimensions. The dimensions were thereafter subjected to further analysis. To conduct factor analysis, it was initially determined by Kaiser-Mayer-Olkin (KMO) measure and Bartlett's test that the number of data is suitable for factor analysis. KMO measure in this study was 0.766 and the value of the significance of the statistic of Bartlett's test which is an approximation of χ^2 statistic is less than 5%, namely 0.00 which shows that factor analysis is suitable for identifying the studied structure.

Table 2. KMO measure and Bartlett's test

| | | |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.766 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 379.078 |
| | df | 140 |
| | Sig. | 0.000 |

The results of the explanatory factor analysis showed that the 18 identified export barriers could be reduced to six underlying dimensions with Eigen values of at least one, for which a proper name is selected according to the content of the loaded variables in each dimension. Items loading at least 0.5 were considered practically significant (Hair, Anderson, Tatham, and Black, 2005); these items were used to come up with the components of each dimensions. The dimensions are: environmental dimension; operational dimension; financial dimension; legal dimension; logistic dimension and resource dimension. As illustrated in table 3, the environmental dimension includes strong international competition, high business risk, different customer culture and required quality standards. The operational dimension has four variables and accounted for 19.21% of the total variance. Non competitive prices, limited information about foreign markets, unfamiliar foreign business practice and insufficient production capacity were loaded under the operational dimension. The financial dimension related

to the economic factors and has three variables: high tariff and non-tariff barriers, unfavorable foreign exchange rates and difficult collection of payments. The legal dimension related to the factors that are driven by governmental issues. This dimension included restrictive rules and regulations and bureaucratic requirements as well as lack of government assistance. Only one variable was loaded under the logistic dimension: difficulties in the process of transportation. The logistic dimension accounted for 9.40% of the total variance - the lowest amount of all the dimensions. The resource dimension as the sixth dimension has two variables; shortage of working capital as a financial resource-based barrier and untrained staffs as a human resource-based barrier, which was loaded under the resource dimension and accounted for 13.37% of the total variance. Also one variable, technical and after sales service, was not loaded under any dimension, because it did not gain the minimum 0.5 required amount. Six dimensions accounted for 85.12% of the total variance. Total variance can be used as the total validity measure of the model.

Table 3. The Results of Exploratory Factor Analysis

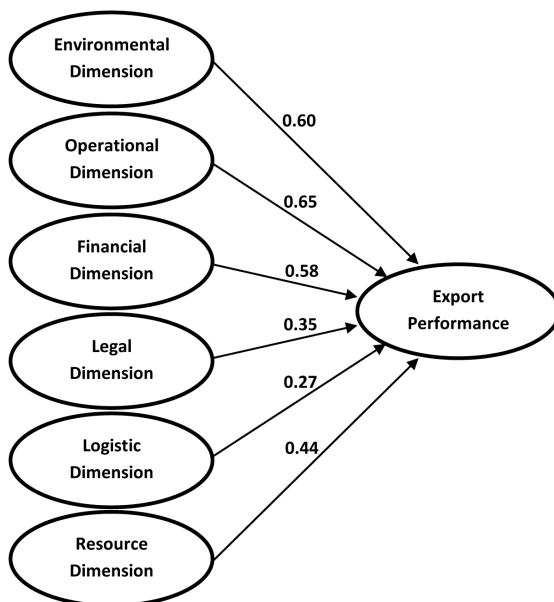
| Barriers | Dimension | | | | | |
|--------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Strong international competition | 0.688 | 0.013 | - 0.088 | - 0.009 | 0.102 | 0.001 |
| High business risk | 0.780 | 0.258 | 0.005 | - 0.024 | 0.004 | 0.217 |
| Different customer culture | 0.701 | 0.091 | 0.260 | - 0.001 | 0.315 | 0.024 |
| Required quality standards | 0.623 | - 0.071 | 0.010 | 0.013 | - 0.266 | 0.009 |
| Non competitive prices | 0.401 | 0.947 | - 0.313 | 0.190 | 0.005 | 0.333 |
| Limited information about markets | 0.030 | 0.915 | 0.034 | 0.210 | 0.045 | - 0.054 |
| Unfamiliar foreign business practice | - 0.001 | 0.755 | 0.111 | 0.005 | 0.107 | 0.125 |
| Technical & after sales service | 0.051 | 0.230 | 0.188 | 0.001 | 0.109 | - 0.268 |
| Insufficient production capacity | 0.187 | 0.613 | 0.041 | - 0.088 | 0.011 | 0.033 |
| High tariff and non-tariff barriers | 0.123 | - 0.214 | 0.612 | 0.317 | 0.083 | 0.006 |
| Unfavorable foreign exchange rates | 0.254 | 0.155 | 0.891 | 0.112 | 0.006 | - 0.027 |
| Difficult collection of payments | - 0.016 | 0.007 | 0.805 | 0.401 | - 0.022 | 0.299 |
| Lack of government assistance | 0.120 | 0.065 | 0.066 | 0.725 | 0.001 | 0.161 |
| Restrictive rules and regulation | 0.301 | 0.344 | 0.003 | 0.802 | 0.030 | 0.003 |
| Bureaucratic requirements | 0.105 | 0.020 | 0.212 | 0.932 | - 0.004 | - 0.001 |
| Transportation difficulties | 0.007 | - 0.101 | 0.013 | 0.006 | 0.680 | 0.015 |
| Shortage of working capital | 0.019 | 0.099 | 0.411 | - 0.245 | 0.117 | 0.816 |
| Untrained staffs for exporting | 0.222 | 0.399 | - 0.301 | 0.006 | 0.099 | 0.923 |
| Eigen value | 2.101 | 3.041 | 2.067 | 1.980 | 1.190 | 1.234 |
| Percentage variance explained | 16.55 | 19.21 | 14.86 | 12.03 | 9.40 | 13.37 |
| Cumulative percentage | 16.55 | 35.46 | 50.32 | 62.35 | 71.75 | 85.12 |

Extraction method: Principal Component Analysis; Rotation method: Varimax with Kaiser Normalization; A rotation converged in 6 iterations

After factor analysis, the structural model was analyzed to evaluate the relationship between export performance and the six export barriers groups as latent variables. A conventional structural equation model (SEM) was used to examine this relationship. First, a confirmatory factor analysis (CFA) was carried out to export barriers with six factors and perceived export performance. For the measurement model, confirmatory factor analysis was performed on export barrier items to learn the fitting level. Thus the obtained data was suitable for the SEM technique. The goodness-of-fit statistics indicated that all criteria met the recommended values in the measurement model and scale items had convergent validity ($\chi^2/df=2.88$; RMSEA=0.07; GFI=0.93; AGFI=0.90; CFI=0.91; NNFI=0.95).

Overall, the fit statistics indicate that the model provides an adequate fit to data for the sampling. The RMSEA equals 0.048 which is lower than 0.1. In the meantime, the two GFI and AGFI are, respectively 0.963 and 0.901, which show good fitness of the model. CFI and NNFI as the other indices are 0.961 and 0.973. Also, the ratio of χ^2 to freedom degree equals 1.53, which is less than 3. So it was concluded that the obtained model had suitable fitness. Once the overall model fit was confirmed, focus moved to the testing of proposed relationship in the model. The relationship between export performance and six groups of export barriers was tested by determining the statistical significance of the path coefficients. All path coefficients in the model were significant at 0.01 level. Hence this model supported the relationships between six identified dimensions as export barriers and export performance as dependent variable. The model of this study is represented in figure 1.

Figure 1. The Model for Measuring the Export Barriers on Export Performance



P-value<0.000; $\chi^2/df=1.53$; RMSEA=0.048; GFI= 0.963; AGFI=0.901; CFI=0.961; NNFI= 0.973

As illustrated in figure 1, the operational dimension has the greatest path coefficient (0.65) and the logistic dimension has the least (0.27). Table 4 presents the T-value and coefficient for the model of study.

Table 4. Standardized Parameter Estimates of the Hypothesized Paths

| Proposed Path | | Correlation | T-value | Results |
|-------------------------|----------------------|-------------|---------|-----------|
| From | To | | | |
| Environmental dimension | → Export Performance | 0.60 | 8.014 | Supported |
| Operational dimension | → Export Performance | 0.65 | 8.733 | Supported |
| Financial dimension | → Export Performance | 0.58 | 7.760 | Supported |
| Legal dimension | → Export Performance | 0.35 | 5.258 | Supported |
| Logistic dimension | → Export Performance | 0.27 | 2.811 | Supported |
| Resource dimension | → Export Performance | 0.44 | 6.067 | Supported |

5. Conclusion

With the expansion of globalization and economic integration among countries, exporting has become an important internationalization strategy for companies and national economies, especially for developing countries. This study aimed to investigate the relationship between export barriers and export performance in the commercial relationship between Greece and Iran. The Greece-Iran commercial relationship was selected since both of them are developing countries and few studies have been conducted on Greece and Iran to explain export barriers, so this study was to contribute to the limited export literature in both countries. In order to support an empirical study, Greek firms were selected which have been exporting their goods to Iran regularly over the five years since 2006.

To conduct the research, 18 factors were selected as export barriers from the literature review and from expert opinions, using the Delphi technique. The results of explorative and confirmative factorial analysis categorized them in six groups: environmental dimension; operational dimension; financial dimension; legal dimension; logistic dimension and resource dimension. The results show that the most important barrier to Greek firms exporting to Iran is the operational dimension, with 0.65 as the path coefficient. The operational dimension consists of four components; non competitive prices, limited information about foreign markets, unfamiliar foreign business practice and insufficient production capacity. It is important for Greek exporters to establish a proper pricing strategy to compete in the Iranian market. Firms from developing countries should control their product prices by cost effectiveness of the firm's operations, because price oriented strategies are important in creating competitive advantage in international markets. As firms begin to compete in export markets, their export success depends upon their ability to develop and implement competitive strategies (Liargovas and Skandalis, 2008). Limited information about the

Iranian market is the other important component of the operational dimension. Many researchers have indicated that developing strong relationships with customers in the export markets positively affects a firm's export performance (Li and Ogunmokun, 2001; Hooley, Greenley, Fahy, and Cadogan, 2001). Greek exporters can share their information about Iranian customer needs, habits and purchase preferences to fill the informational gap and enhance marketing intelligence. Greek exporter representatives also could attend numerous trade fairs and exhibitions in Iran to improve their firm's marketing intelligence and enhance their relationship with Iranian distributors. It should be noted that while competitive pricing strategies can have a short-term effect, marketing intelligence could bring long-term benefits.

The path coefficient of the environmental dimension – including strong international competition, high business risk, different customer culture and required quality standards - was 0.60, which indicated that environmental factors play an important role in hindering exporting from Greece to Iran. High business risk was regarded as the most influential component of the environmental dimension. Political and economical macro-factors increase business risk in Iran. Although Iran has made economic reforms in recent years, the economic risk of business has increased due to the volatile conditions. The third important dimension is the financial dimension, made up of three components; high tariff and non-tariff barriers, unfavorable foreign exchange rates and difficult collection of payments. Tariff and non-tariff barriers negatively affect the performance of Greek exporters, especially those which export agricultural products. On the other hand, sanctions imposed by international organizations could hinder money transactions between Greece and Iran. But sanctions were not regarded in this study as an independent variable and were studied only indirectly under the headings of business risk and difficult collection of payment.

The resource dimension, with a coefficient of 0.44, has two components. It was studied from two perspectives; financial resource and human resource. Staff unqualified in exporting is the most critical component of the resource dimension. It is believed that marketing expertise is one of the discriminating factors between high and low performing companies in export markets (Ogunmokun and Ng, 2004, Koksall and Kettaneh, 2011). Attending trade fairs and exhibitions could be regarded as a training program for staff, especially at managerial levels. Firms should try to develop their staff's skill in finding the available export opportunities as well as fostering knowledge about exporting process. Three components; lack of government assistance, restrictive rules and regulations and bureaucratic requirements were loaded under the legal dimension. While lack of government assistance didn't relate to the Iranian market, other components led by the Iranian government increased the risk of business in Iran for Greek exporters. Bureaucratic requirements is one of the critical factors that hinder international firms from entering the market of Iran; the Doing Business Report that was published by the World Bank Group ranked Iran 138th in its trading across borders

index, among 183 countries that were studied in this survey. The logistic dimension had the lowest path coefficient of the six dimensions and has only one variable. Transportation difficulties such as inadequate transportation facilities, inefficient transportation systems and cost of transportation could affect the export sales volume. Different transportation systems in Iran could prove an advantage rather than a barrier, but cost of transportation plays a negative role in export performance.

Of the 18 factors, technical and after sales service was not loaded under any dimension and was dropped out of the study. It should be noted that technical and after sales service has significant influence as an export barrier when export products need technical support; since most of Greek exports to Iran are agricultural and health products, technical and after sales service wasn't meaningful for the study sample. The current study has some implications for company managers, policy makers, and governmental organizations in Greece. This study also could tighten the commercial relationship between Greece and Iran, as the world's oldest civilizations. There are some limitations to the present study. First of all, not all the barriers that may affect export performance were examined. Some factors such as international sanctions were not included in the study and separate studies need to be conducted to explore the role of such factors. Second, as the study focused on the commercial relationship between Greece and Iran, the findings cannot be generalized to fit all developing countries. Future studies based on samples from various developing countries, would be able to generalize the findings of the current research; also this research could be repeated for Iranian exporters who target Greece as their destination market.

References

- Ahmed, Z.U., Craig, J.C., Baalbaki, I., and Hadadian, T.V., 2004, "Export barriers and firm internationalization: A study of Lebanese entrepreneurs", *Journal of Management and World Business Research*, 1, 1, 11-22.
- Altintas, M.H., Tokol, T., and Harcar, T., 2007, "The effects of export barriers on perceived export performance: An empirical research on SMEs in Turkey", *EuroMed Journal of Business*, 2, 1, 36-56.
- Craig, J.C., and Ahmed, Z.U., 2005, "The impact of barriers to export on export marketing performance", *Journal of Global Marketing*, 19, 1, 71-94.
- Da Silva, P.A., and Da Rocha, A., 2001, "Perception of export barriers to Mercosur by Brazilian firms", *International Marketing Review*, 18, 6, 589-610.
- Hair, J.F., Anderson, R.E., Tatham, R.L., and Black, W.C., 2005, *Multivariate data analysis with readings*, (5th Ed.), Englewood Cliffs, New Jersey: Prentice-Hall Inc.
- Hooley, G., Greenley, G., Fahy, J., and Cadogan, J., 2001, "Market-focused resources, competitive positioning and firm performance", *Journal of Marketing Management*, 17, 5/6, 503-520.
- Karelakis, C., Mattas, K., and Chryssochoidis, G., 2008, "Export problems perceptions and clustering of Greek wine firms", *Euromed Journal of Business*, 3, 1, 6-22.
- Kneller, R., and Pisu, M., 2011, "Barriers to exporting: What are they and who do they matter?", *The World Economy*, 34, 6, 893-930.

- Kneller, R., Pisu, M., and Yu, Z., 2008, "Overseas trading costs and firm export performance", *Canadian Journal of Economics*, 41, 2, 639-669.
- Koksal, M.H., and Kettaneh, T., 2011, "Export problems experienced by high- and low-performing manufacturing companies: A comparative study", *Asia Pacific Journal of Marketing and Logistics*, 23, 1, 108-126.
- Lee, J., and Habte-Giorgis, B., 2004, "Empirical approach to the sequential relationships between firm strategy, export activity, and performance in U.S. manufacturing firms", *International Business Review*, 13, 101-129.
- Leonidou, L.C., 2000, "Barriers to export management: An organizational and internationalization analysis", *Journal of International Management*, 6, 2, 121-148.
- Li, L., and Ogunmokun, G.O., 2001, "Effect of export financing resources and supply chain skills on export competitive advantages: Implications for superior export performance", *Journal of World Business*, 36, 3, 260-279.
- Liargovas, P.G., and Skandalis, K.S., 2008, "Motives and marketing strategies of Greek companies exporting to south-east European markets", *South-Eastern Europe Journal of Economics*, 6, 2, 227-244.
- Matanda, M.J., and Freeman, S., 2009, "Effect of perceived environmental uncertainty on exporter-importer inter-organizational relationships and export performance improvement", *International Business Review*, 18, 89-107.
- Mavrogiannis, M., Bourlakis, M.A., Dawson, P.J., and Ness, M.R., 2008, "Assessing export performance in the Greek food and beverage industry: An integrated structural equation model approach", *British Food Journal*, 110, 7, 638-654.
- Mpinganjira, M., 2011, "Perceived benefits and barriers to export involvement: Insights from non-exporters", *African Journal of Business Management*, 5, 22, 9116-9124.
- Navarro, A., Losada, F., Ruza, E., and Diez, J.A., 2010, "Implications of perceived competitive advantages, adaptation of marketing tactics and export commitment on export performance", *Journal of World Business*, 45, 49-58.
- Ogunmokun, G.O., and Ng, S., 2004, "Factors influencing export performance in international marketing: A study of Australian firms", *International Journal of Management*, 21, 2, 172-185.
- Ojala, A., 2007, "Entry barriers of small and medium-sized software firms in the Japanese market", *Thunderbird International Business Review*, 49, 6, 690-705.
- Ortega, S., 2003, "Export barriers: Insights from small and medium-sized firms", *International Small Business Journal*, 21, 4, 403-419.
- Owusu-Frimpong, N., and Mmeh, S., 2007, "An evaluation of the perceptions and marketing practices of non-traditional exporters in Ghana", *Thunderbird International Business Review*, 49, 1, 57-76.
- Papadopoulos, N., and Martín Martín, O., 2010, "Toward a model of the relationship between internationalization and export performance", *International Business Review*, 19, 388-406.
- Solberg, C.A., and Olsson, U.H., 2010, "Management orientation and export performance: The case of Norwegian ICT companies", *Baltic Journal of Management*, 5, 1, 28-50.
- Sousa, C.M.P., 2004, "Export performance measurement: An evaluation of the empirical research in the literature", *Academy of Marketing Science Review*, 8, 9, 1-22.
- Sousa, C.M.P., Martínez-López, F.J., and Coelho, F., 2008, "The determinants of export performance: A review of the research in the literature between 1998 and 2005", *International Journal of Management Review*, 10, 4, 343-374.
- Stoian, M.C., Rialp, A., and Rialp, J., 2011, "Export performance under the microscope: A glance through Spanish lenses", *International Business Review*, 20, 117-135.
- Wheeler, C., Ibeh, K., and Dimitratos, P., 2008, "UK export performance research: Review and implications", *International Small Business Journal*, 26, 2, 207-239.