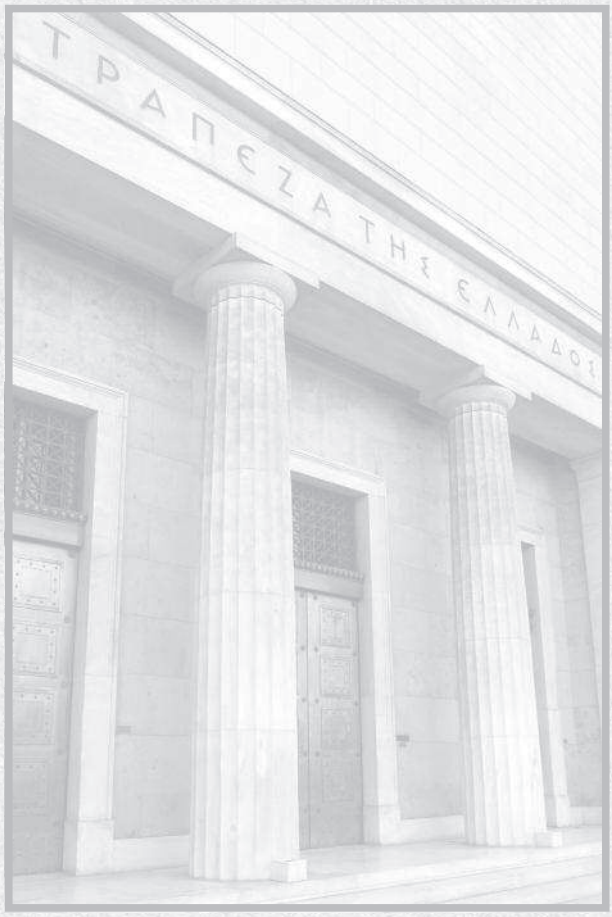
ECONOMIC BULLETIN

No 43



JULY
2016

BANK OF GREECE
EUROSYSTEM

BANK OF GREECE
21, E. Venizelos Avenue
102 50 Athens

www.bankofgreece.gr

Economic Analysis and Research Department - Secretariat
Tel. +30 210 320 2393
Fax +30 210 323 3025

Printed in Athens, Greece
at the Bank of Greece Printing Works

ISSN 1105 - 9729

CONTENTS

THE DETERMINANTS OF NEW FIRMS' EXPORT PERFORMANCE 7
Nikos Vettas
Ioannis Giotopoulos
Evangelia Valavanioti
Svetoslav Danchev

THE TRANSITION TO THE NEW METHODOLOGY FOR THE COMPILATION OF BALANCE OF PAYMENTS STATISTICS – BPM6 19
Styliani Belli
Constantina Backinezos

THE GREEK BRAIN DRAIN: THE NEW PATTERN OF GREEK EMIGRATION DURING THE RECENT CRISIS 31
Sophia Lazaretou

BANK RECAPITALISATION: A NECESSARY BUT NOT SUFFICIENT CONDITION FOR RESUMING LENDING 55
Faidon Kalfaoglou

WORKING PAPERS
(January – June 2016) 77

ARTICLES PUBLISHED IN PREVIOUS ISSUES OF THE ECONOMIC BULLETIN 81

THE DETERMINANTS OF NEW FIRMS' EXPORT PERFORMANCE*

Nikos Vettas
Foundation for Economic and Industrial Research (IOBE)
Athens University of Economics and Business
and Centre for Economic Policy Research, UK

Ioannis Giotopoulos
Department of Economics, University of Peloponnese

Evangelia Valavanioti
Foundation for Economic and Industrial Research (IOBE)

Svetoslav Danchev
Foundation for Economic and Industrial Research (IOBE)

I INTRODUCTION

Export activity is a key element of the operation of small and new firms, enabling them to create value, grow and have access to new knowledge and technologies (Yeoh 2004). The creation of new export-oriented firms has become a crucial matter of entrepreneurship that has attracted the interest of the academic community and policy makers in Greece, given its relevance for the productive restructuring and competitiveness of the Greek economy and economic growth in general. Besides, it has become clear that Greece's "new growth model" must translate into a higher share of exports in national output.

More generally, in an era of growing globalisation and ever-increasing international competition, new firms need to follow internationalisation and export enhancement strategies in order to successfully cope, ensure their long-term viability and exploit opportunities for market penetration beyond national borders (Porter 1986, 1990).

Especially in recent years, rapid technological advances, wide diffusion of Information and Communication Technologies (ICT) and digital development have enabled the emergence of new export-oriented firms (Oviatt and McDougall 1994). In other words, the widespread use of the Internet and the rapid development of e-commerce appear to open up major opportunities for new firms to penetrate, and establish themselves in foreign markets, as they provide unique, efficient and alternative channels for reaching customers at a global level.

Against this background, McDougall et al. (1994) and Oviatt and McDougall (2005) formulated a theoretical framework, under which international new ventures are capable of identifying opportunities across national borders, are alert to the possibilities of combining resources from different national markets and are also able to utilise at an international level competencies related to knowledge absorption and networking. As pointed out by Hessels and van Stel (2011), new export-oriented firms in the process of their internationalisation tend to develop specialised human capital and innovative skills. Therefore, the importance of new firms with export activity can largely be attributed to the catalytic role they can play in the diffusion of new knowledge and the absorption of technology, which in turn are expected to contribute to the introduction of new innovative solutions, improved productivity and thus economic growth.

The purpose of this empirical analysis is to investigate the factors behind the decision of

* This empirical research forms part of a more extensive study entitled "Characteristics of New Firms in Greece", prepared by the Foundation for Economic and Industrial Research (IOBE) with the support of the Bank of Greece.

new firms in Greece to internationalise. Besides providing insights into a crucial aspect of the Greek economy, the empirical findings and conclusions of this research ultimately aim to provide policy recommendations on ways to strengthen businesses' export performance and the competitiveness of the domestic entrepreneurial system.

The article is structured as follows: Section 2 presents the basic theoretical and empirical background and provides a brief overview of the empirical literature on business export performance. Section 3 describes the data and the methodology employed, while Section 4 reports the empirical findings. Finally, Section 5 summarises the results of the research, along with some indicative and tentative policy recommendations for strengthening the export performance of new firms.

2 A BRIEF REVIEW OF THE LITERATURE ON THE FACTORS AFFECTING THE EXPORT PERFORMANCE OF NEW FIRMS

The variables incorporated in the econometric model have been selected on the basis of data availability and the research questions examined, in combination with the theoretical and empirical background which has been developed by international literature in order to investigate the determinants that affect the export performance and the internationalisation of firms and which is briefly described below. Such determinants can be broadly divided into firm-specific factors and those associated with the overall environment in which a firm operates, including industry-specific and spatial characteristics.

2.1 FIRM-SPECIFIC FACTORS

A key variable associated with the export performance of an enterprise is its age. Younger firms are generally thought to be more vulnerable and to need time to learn from their presence in the market, thus improving their management's attitudes and production methods. Zahra et al. (1997) and Calof (1994) find a positive relationship between age and export performance.

A second key variable examined in international literature as a possible factor affecting firms' export performance refers to size. A large body of empirical research finds a positive correlation between firm size and export performance (e.g. Kaynak and Kuan 1993, Moini 1995, Zahra et al. 1997). More generally, there is empirical evidence that larger firms are the most active abroad, irrespective of whether size is defined on the basis of turnover, total assets or staff numbers.

Furthermore, international literature investigating firms' decision to export argues that the high initial cost they face when planning to enter foreign markets may be an inhibiting factor. This cost is closely linked to the collection of information regarding the environment in foreign markets, the upgrading and adjustment of product quality, and distribution channels (Bernard and Jensen 2004, Roberts and Tybout 1997). In the same vein, Greenaway et al. (2007) investigate the role played by firms' financing constraints in their decision to internationalise. Their empirical findings suggest that highly liquid and low-leveraged firms tend to be export-oriented, while firms facing liquidity and indebtedness constraints tend to refrain from export activity.

2.2 INDUSTRY-SPECIFIC FACTORS

According to Hensler et al. (1997), although firms operating in the same industry are not necessarily identical with one another, they tend to face the same survival probabilities and growth prospects and apply similar production methods. Consequently, the sectoral dimension should be given serious consideration when examining determinants of firm performance, such as export activity.

The sectoral dimensions considered in this empirical investigation refer to the industry's (i) ICT intensity and (ii) knowledge intensity.

Given a lack of available data on the adoption of ICT and knowledge intensity at the firm level, an industry-level aggregation can lead to interesting findings. If the environment in which firms operate is characterised as highly ICT- or knowledge-intensive, then there is more room for firms also to adopt ICT or absorb knowledge in comparison with firms operating in an environment with low ICT and knowledge intensity (Giotopoulos and Fotopoulos 2010, Giotopoulos 2014).

Regarding the role of ICT in foreign market penetration by new firms, the relevant literature has pointed out about two decades ago —when information and communication technologies were at an early stage of development, before their current rapid growth and diffusion— that ICT and digital development greatly facilitate the emergence and strong presence of new export-oriented firms (Oviatt and McDougall 1994), mainly because the Internet offers efficient alternative channels for finding new customers in international markets.

With regard to knowledge-intensive firms, their activities according to Coviello (1994) are characterised by the high value added of scientific knowledge, which is in turn incorporated both in the provision of services and the processes for their outflow. According to Miles et al. (1995), firms active in the industry of knowledge-intensive business services (KIBS) rely heavily on professional knowledge and supply products that are sources of information and knowledge for their users, or use their knowledge to produce services which are intermediate inputs to their clients' production processes. Furthermore, KIBS firms represent an important supplier industry and, through the long-term bonds they establish with the manufacturing sector (B2B relationships), play a major role in the introduction of innovation, acting as "innovation bridges", as Czarnitzki and Spielkamp (2003) put it. Given its structural characteristics as described above, the KIBS industry is expected to create a favourable environment for firms' decision to export, by its potential to provide a critical mass of suppliers, and possible innovation facilitators for business clients across the borders.

2.3 SPATIAL FACTORS

Finally, when examining firm performance, the spatial dimension is also taken into account. In our analysis, one of the research questions posed is whether and how the export performance of new firms is influenced by the degree of urbanisation in the area where their headquarters and primary place of business are located.

According to international literature, the concentration of high-quality human resources, inter-firm networks and intra-regional knowledge spillovers enable firms located in metropolitan regions to exploit spatial externalities, known as "agglomeration economies" (see e.g. Jaffe et al. 1993, Krugman 1998). In the context of his new economic geography theory, Krugman (1998) argues that these externalities exist in highly urbanised regions which benefit from a large pool of high-quality labour, skills and expertise. Namely, in these areas there is a pool of specialised labour, with know-how and skills, which results in lower searching costs for firms. Moreover, when an economic activity is concentrated in a geographical area, it is highly likely that the suppliers of the sector concentrate in the specific geographical zone, thus providing the firms of the sector with the possibility to find specialised resources, raw materials and equipment at more competitive prices.

In this direction, Freeman et al. (2012) argue that large metropolitan centres present an advantage, as firms can more easily access export-related networks, infrastructures and consultancy structures or services and thus they are expected to achieve higher export performance in comparison with firms operating in less urbanised areas.

3 DATA AND METHODOLOGY

3.1 DATA

The dependent variable of the model is the ratio of a firm's sales in international markets to its total turnover. Available data refer to the period 2010-2012 and make up a total sample of 8,764 observations for firms established in the period 2000-2004. These data have been derived from ICAP's Greek Financial Directory for the years 2012, 2013 and 2014. For the independent variables, as described right below, the source is the Infobank Hellastat database, which provides business financial data from published balance sheets and income statements. In addition, this database provides information on a firm's year of establishment, branch of economic activity and location.

3.2 VARIABLES

On the basis of the theoretical and empirical background discussed in Section 2, the model variables were constructed, as described in Tables 1-3.

Subsequently, Charts 1-3 plot the average export percentages by period of establishment, activity sector and size group, respectively.

It can be observed that export performance changes with the year of establishment, i.e. firm age (see Chart 1), as younger firms appear to have appreciably lower export percentages.

The analysis focuses on new firms established between 2000 and 2004, illustrating their average export percentages by sector of activity based on STAKOD 2003 classification.

Table 1 Model variables

Variable name	Variable measurement method
Exports	Sales in foreign markets as a percentage of total turnover.
Age	A natural logarithm of the age of a firm, which has been calculated as the difference of the year for which information has been retrieved from the corresponding balance sheet minus the year of the firm's establishment.
Size group	Categorisation of firms based on the average turnover for the reviewed period, following the definition of the European Commission. Specifically, firms are divided into: a) very small (micro), with a turnover of up to €2 million, b) small, with a turnover of €2-10 million, c) medium-sized, with a turnover of €10-50 million, and d) large, with a turnover higher than €50 million. Categorical variable taking on the value 1 for very small firms, the value 2 for small firms, the value 3 for medium-sized firms and the value 4 for large firms.
Liquidity	Current assets to short-term liabilities ratio.
Indebtedness	Firm's total assets to total liabilities ratio.
ICT-intensive manufacturing industries (ict-manuf dummy)	A dummy variable that takes on the value 1 when the firm belongs to an ICT-intensive manufacturing industry and 0 otherwise. According to the OECD, the industries which are defined as ict-manuf are those manufacturing "office, accounting and computing machinery", "insulated wire and cable", "electronic valves and tubes and other electronic components", "television and radio transmitters and receivers and recording apparatus" and "measuring, checking, testing instruments and appliances".
ICT-intensive services industries (ict-serv dummy)	A dummy variable that takes on the value 1 when the firm belongs to an ICT-intensive services industry and 0 otherwise. According to the OECD, the industries which are defined as ict-serv are those practising "wholesaling of electrical house appliances", "telecommunications", "renting of office machinery and equipment" and "computer and related activities".
Knowledge-intensive business services industries (kibs dummy)	A dummy variable that takes on the value 1 when firms operate in kibs sectors and the value 0 otherwise. According to Eurostat, the industries which are defined as kibs are those of "information technology", "Research & Development", "legal activities", "architectural and engineering activities", "consultancy services", "technical tests and analyses services" and "advertising services".
Business location (location dummy)	A dummy variable that takes on the value 1 for the prefectures of Attica and Thessaloniki, namely the two largest urban centres, and the value 0 for the remaining prefectures.

Source: Authors' calculations.

Table 2 Descriptive statistics of continuous variables, firms established in 2000-2004

Variable name	Number of observations	Mean value	Standard deviation
Exports	8,848	0.064	0.18
Age	135,980	5.68	3.26
Mean size*	96,076	3.29	35.1
Liquidity	84,526	0.62	0.32
Indebtedness	82,743	0.75	42.4

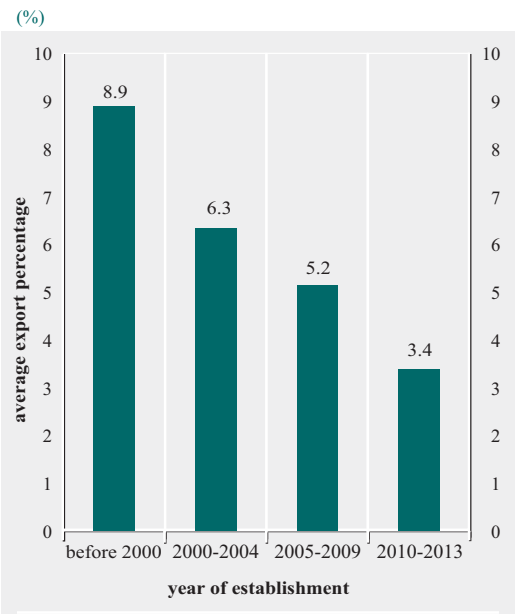
Source: Authors' calculations.
* Average turnover per firm for the reviewed period (2010-2012) in EUR millions.

Table 3 Descriptive statistics of discrete variables, firms established in 2000-2004

Variable name	Number of observations	$D_k=1$	$D_k=0$
ICT-intensive manufacturing industries (ict-manuf dummy)	136,321	99.7%	0.3%
ICT-intensive services industries (ict-serv dummy)	136,321	97%	3%
Business knowledge-intensive services industries (kibs dummy)	136,321	91%	9%
Business location (location dummy)	136,321	36%	64%

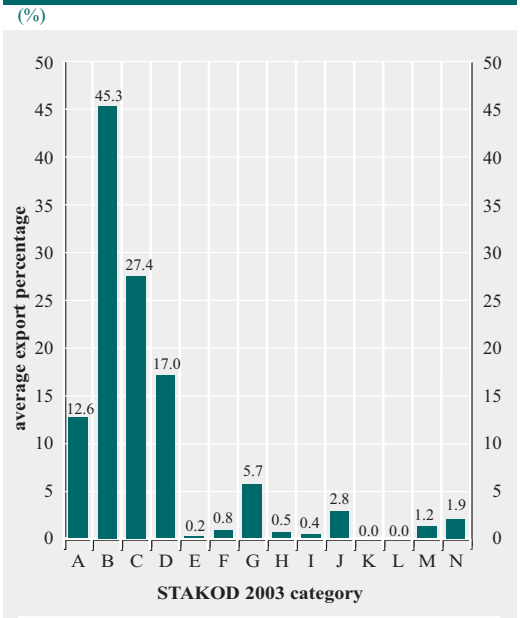
Source: Authors' calculations.

Chart 1 Firms' average export percentage by period of establishment



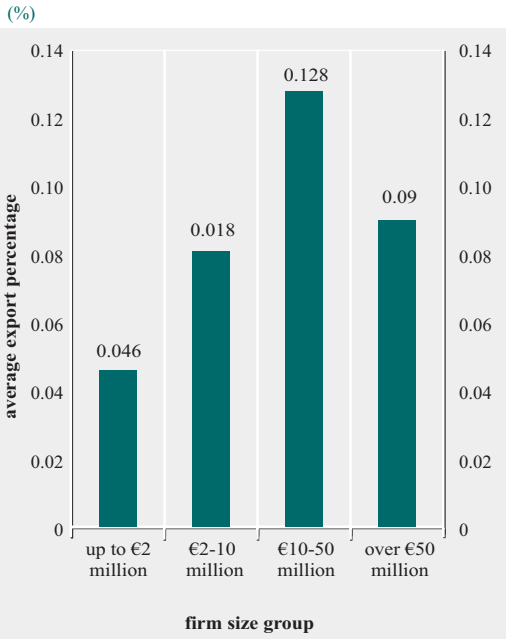
Source: Authors' calculations.

Chart 2 Average export percentage of new firms established in 2000-2004, by sector of activity



Source: Authors' calculations.

Chart 3 Exports by firm size group



Source: Authors' calculations.

In this regard, certain sectors appear to be highly export-oriented relative to others. Specifically, the sectors of Agriculture and Livestock Breeding (Category A in STAKOD 2003), Fishing (Category B), Mines and Quarries (Category C) and finally Manufacturing (Category D) have considerably higher export percentages relative to the other sectors (see Chart 2).

Turning to firm size (see Chart 3), smaller firms (with a turnover of up to €2 million) have the lowest average export percentage. Generally, the average export percentage increases with size; however, larger firms (with a turnover of more than €50 million) have a lower export percentage in comparison with medium-sized firms (with a turnover of €10 million to €15 million).

3.3 METHODOLOGY

In order to investigate the determinants of export performance of new firms, we employed an unbalanced panel data, tested for heterogeneity (Arellano and Bover 1995, Baltagi 2008). The function estimated has the following general form:

exports = f {size group, age, liquidity, indebtedness, ict-manuf dummy, ict-serv dummy, kibs dummy, location dummy}

The model was estimated using the fixed effects approach, in which the constant term changes per panel unit (in our analysis, per firm), as well as the random effects assumption, in which the constant term is common to all panel entities and panel differences are considered to change randomly, incorporated in the residues of the regression.

In both cases, a sectoral clustering is applied to account for any within-panel correlation, enabling a better estimation of standard errors. The selection between the two models is given by the Hausman test. The result of the test is $\chi^2(3)=3.81$ and $Prob>\chi^2=0.28$, showing that the random effects model is more appropriate for interpreting the relationship between exports and other variables. Besides, the random effects method requires the estimation of fewer parameters and thus affords higher degrees of freedom and lower variance.

Before proceeding to the interpretation of the results, we note that the Wald statistical test rejects the hypothesis that the results are jointly statistically insignificant.

4 EMPIRICAL RESULTS

Looking at the empirical results from the random effects method for the entire sample (see second column in Table 4), we can reach the following conclusions. We can observe that the location variable has a negative sign and is statistically significant at the 1% level. This means that firms located in regional Greece, namely outside the prefectures of Attica and Thessaloniki, demonstrate higher penetration of foreign markets. A possible interpretation of this empirical finding could be the fact that the export activity of Greek firms focuses mainly

on agricultural products, metal ores, processed food and certain other manufacturing products, while the sectoral structure of exports from urban areas is dominated by services.

At the other end of the spectrum, the coefficient of age has, unsurprisingly, a positive sign at a significance level of 1%. This finding is in line with the international literature. Specifically, Calof (1994) puts forward theoretical arguments suggesting that firms' export performance tends to strengthen as their life cycle progresses. As firms grow in age and establish themselves in the market, export orientation increasingly becomes a sustainable strategic option.

Similarly, the coefficient of firm size (by size group) is positive and statistically significant at the 1% level. This result is explained by the fact that smaller firms do not have the dynamism required in order to turn to foreign markets. By contrast, the larger a firm is, the more its resources and the less its scope for exploiting growth opportunities in the domestic context (Calof 1994). Furthermore, as a firm grows, the higher its ability is to successfully overcome potential barriers to internationalisation (Zahra et al. 1997).

Regarding ICT-related characteristics, in firms in both the Manufacturing and the Services sectors, ICT intensity is positively linked to export orientation, testing for effects of the other explanatory variables (especially firm size) in the model. Specifically, if a manufacturing firm shifts from *non-ict manuf* to *ict-manuf* activities, its degree of export orientation is expected to increase by 0.43 unit (or 43 percentage points). Lesser, but equally statistically significant (at the 1% level), is the effect of the *ict-serv* variable on the degree of export orientation.

The above result may be explained by the fact that technology is a very important source of competitive advantage in international markets (Miller 1994). According to Ito and Pucik (1993), technological specialisation is expected to be positively linked with the export performance of new firms, as the new firms which specialise in the output of ICT-intensive goods and services are expected to have more possibilities to export in comparison with firms specialising in low ICT-intensity products (Samiee and Walters 1990). A considerable body of empirical literature supports the existence of this relationship (e.g. Cavusgil 1084, Moini 1995, Samiee and Walters 1990, Zahra et al. 1997).

Knowledge-intensity characteristics (kibs: Knowledge Intensive Business Services)

Table 4 Determinants of export performance – Random effects model for firms established in 2000-2004

Dependent variable: exports	Total sample	Manufacturing
location	-0.032*** (0.006)	-0.045*** (0.020)
age	0.030*** (0.007)	0.082*** (0.023)
size group	0.033*** (0.004)	0.075*** (0.015)
ict-manuf	0.434*** (0.072)	0.343*** (0.112)
ict-serv	0.042*** (0.017)	-
kibs	-0.028*** (0.011)	-
indebtedness	-0.007* (0.003)	-0.027* (0.015)
liquidity	0.013** (0.0078)	-0.040 (0.032)
constant term	-0.041*** (0.017)	-0.079 (0.061)
Number of observations	8764	1863
Period	2010-2012	2010-2012
Wald test (P-value)	163.93 (0.00)	56.00 (0.00)
Hausman test (P-value)	3.81 (0.28)	2.82 (0.42)
LM Test (P-value)	6467.06 (0.00)	1308.48 (0.00)
Mean VIF	4.46	6.56

Notes: *, **, *** denote statistical significance at a level of 10%, 5% and 1% level, respectively. The standard error is shown in parentheses, unless otherwise indicated.
Source: Authors' calculations.

appear to be statistically significant at a level of 1%, but with a negative sign. This suggests that knowledge-intensive industries are less export-oriented, as expected by their nature, given that most industries in the services sector are largely characterised as non-tradeable.

Firm indebtedness is found to be negatively correlated with export performance at a significance level of 10%. In other words, when a firm has high debt obligations relative to its own funds, this poses difficulties to export activity. Finally, as expected, liquidity is a statistically significant determinant of export performance, lending support to the view that export-oriented businesses base their export activity on the existence of liquidity.

The interesting results presented above can be interpreted in the light of the international literature exploring the impact of financial constraints on export performance. Specifically, Melitz (2003) points out the role of sunk cost as an obstacle to the internationalisation of young firms at the early stages of their life cycle. Moreover, the existence of information asymmetries in capital markets highlights the crucial importance of financial factors as determinants of export behaviour (e.g. Chaney 2005, Manova 2006). In this context, a number of empirical studies confirm that financially sound firms are more likely to export. Accordingly, financial constraints act as a barrier to foreign market penetration, while better access to external financing can considerably increase the probability that a firm starts to export and also shortens the time before a firm decides to do so (Bellone et al. 2010).

In order to identify any multicollinearity problems and ensure consistency of estimators, we observe the test values *1/VIF* (VIF: Variance Inflation Factor) and come to the conclusion that the econometric model we have estimated is free of multicollinearity problems.

Alternatively to the random effects model and once the fixed effects model has been rejected through the Hausman test, we perform a Breusch-Pagan test with a Lagrange multiplier (or LM test) to check the appropriateness of the model versus a simple OLS model. The result of the test rejects the null hypothesis that there is no statistically significant difference across firms (no panel effect), consequently the selection of the random effects model is deemed to be appropriate.

In order to test the robustness of our results, we perform additional estimations using alternative approaches enabling to detect any heterogeneity and/or heteroskedasticity problems. As a first step, we re-estimate our random effects model by selecting grouping per sector of activity. The results of this process, however, revealed fewer statistically significant factors and a shorter confidence interval, indicating heterogeneity across sectors of activity. This is so because, among the sectors examined, there are some with stronger export activity, such as the manufacturing sector.

Then, by the same procedure as the one we applied to the total sample (2000-2004), we focus on manufacturing firms only and perform estimations using the random and fixed effects methods. The remaining sectors do not provide a representative sample that would allow us to draw reliable conclusions.

The sample consists of 1,863 observations. On the basis of the Hausman test results, the random effects model was also selected in this analysis as the most appropriate one.

In the case of the manufacturing sample, with the exceptions of the liquidity variable which was not found to be statistically significant and of the indebtedness variable which is statistically significant at a level of 10%, all the remaining variables are shown to be statistically significant at a level of 1%, just as in the total sample (see third column in Table 4).

Closing the section of empirical results, it is worth noting that the results for the subsample of young firms (2000-2004) were confirmed

with the same significance and the same signs for the total sample of firms (2000-2012).

5 CONCLUSIONS

The export performance of a firm, as shown by the model analysed, depends to a large extent on the sector of its activity. Greater export orientation typically characterises those firms in the Primary Sector or Manufacturing, which, although obviously not providing knowledge-intensive business services, possess Information and Communications Technology.

The size of a firm is also a determinant of export orientation, with larger firms appearing to be more export-oriented. Similar conclusions are drawn also for firm age. The firms that are already well-established in the market tend to be more successful in penetrating markets abroad. A necessary factor behind increased export activity is liquidity, as well as low indebtedness.

Against this background, the analysis could also highlight the importance of the activation and development of effective advisory structures for new firms with a view to enhancing their export performance. A policy in this direction should include effective provision of supportive services, in terms of: (a) facilitating the transfer of information and knowledge regarding foreign markets and technology demand; (b) helping firms to develop strategic action plans with respect to international activities; (c) providing tools for networking with potential strategic business partners already operating in foreign markets; (d) establishing a practical business guide for businesses aspiring to expand their activities to other countries inside and outside the European Union; (e) removing potential legal obstacles; and (f) raising awareness of finance options for prospective exporters.

REFERENCES

Arellano, M. and O. Bover (1995), "Another Look at the Instrumental Variable Estimation of Error-Components Models", *Journal of Econometrics*, 68(1), 29-51.

Baltagi, B. (2008), *Econometric Analysis of Panel Data*. John Wiley & Sons.

Bellone, F., P. Musso, L. Nesta and S. Schiavo (2010), "Financial Constraints and Firm Export Behaviour", *The World Economy*, 33(3), 347-373.

Bernard, A.B. and J.B. Jensen (2004), "Why Some Firms Export", *Review of Economics and Statistics*, 86(2), 561-569.

Calof, J.L. (1994), "The Relationship between Firm Size and Export Behavior Revisited", *Journal of International Business Studies*, 25(2), 367-387.

Cavusgil, S.T. (1984), "Organizational Characteristics Associated with Export Activity", *Journal of Management Studies*, 21(1), 3-22.

Chaney, T. (2005), "Liquidity Constrained Exporters", mimeo, University of Chicago.

Coviello, N.E. (1994), "Internationalizing the Entrepreneurial High Technology, Knowledge-Intensive Firm" (Doctoral dissertation, ResearchSpace@ Auckland).

Czarnitzki, D. and A. Spielkamp (2003), "Business Services in Germany: Bridges for Innovation", *The Service Industries Journal*, 23(2), 1-30.

Freeman, J., C. Styles and M. Lawley (2012), "Does Firm Location Make a Difference to the Export Performance of SMEs?", *International Marketing Review*, 29(1), 88-113.

Giotopoulos, I. (2014), "Dynamics of Firm Profitability and Growth: Do Knowledge-Intensive (Business) Services Persistently Outperform?", *International Journal of the Economics of Business*, 21(3), 291-319.

Giotopoulos, I. and G. Fotopoulos (2010), "Intra-Industry Growth Dynamics in the Greek Services Sector: Firm-Level Estimates for ICT-Producing, ICT-Using, and Non-ICT Industries", *Review of Industrial Organization*, 36(1), 59-74.

Greenaway, D., A. Guariglia and R. Kneller (2007), "Financial Factors and Exporting Decisions", *Journal of International Economics*, 73(2), 377-395.

Hensler, D.A., R.C. Rutherford and T.M. Springer (1997), "The Survival of Initial Public Offerings in the Aftermarket", *Journal of Financial Research*, 20(1), 93-110.

Hessels, J. and A. van Stel (2011), "Entrepreneurship, Export Orientation, and Economic Growth", *Small Business Economics*, 37(2), 255-268.

Ito, K. and V. Pucik (1993), "R&D Spending, Domestic Competition, and Export Performance of Japanese Manufacturing Firms", *Strategic Management Journal*, 14(1), 61-75.

Jaffe, A.B., M. Trajtenberg and R. Henderson (1993), "Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations", *Quarterly Journal of Economics*, 108(3), 577-598.

Kaynak, E. and W.K. Kuan (1993), "Environment, Strategy, Structure, and Performance in the Context of Export Activity: An Empirical Study of Taiwanese Manufacturing Firms", *Journal of Business Research*, 27(1), 33-49.

Krugman, P. (1998), "What's New About the New Economic Geography?", *Oxford Review of Economic Policy*, 14(2), 7-17.

Manova, K. (2006), "Credit Constraints, Heterogeneous Firms and International Trade", mimeo, available at SSRN: http://ssrn.com/paper=952552.

McDougall, P., S. Shane and B.M. Oviatt (1994), "Explaining the Formation of International New Ventures: The Limits of Theories from International Business Research", *Journal of Business Venturing*, 9(6), 469-487.

Melitz, M.J. (2003), "The Impact of Trade in Intra-Industry Reallocations and Aggregate Industry Productivity", *Econometrica*, 71(6), 1695-1725.

Miles, I., N. Kastrinos, R. Bilderbeek, P. Den Hertog, K. Flanagan, W. Huntink and M. Bouman (1995), "Knowledge-intensive business services: users, carriers and sources of innovation". European Innovation Monitoring System (EIMS) Reports.

Miller, R. (1994), "Global R&D Networks and Large-scale Innovations: The Case of the Automobile Industry", *Research Policy*, 23(1), 27-46.
Moini, A. (1995), "An Inquiry into Successful Exporting: An Empirical Investigation Using a Three-Stage Model", *Journal of Small Business Management*, 33(3), 9-25.
Oviatt, B.M. and P.P. McDougall (1994), "Toward a Theory of International New Ventures", *Journal of International Business Studies*, 25(1), 45-64.
Oviatt, B.M. and P.P. McDougall (2005), "Defining International Entrepreneurship and Modeling the Speed of Internationalization", *Entrepreneurship Theory and Practice*, 29(5), 537-554.
Porter, M.E. (ed.) (1986), *Competition in Global Industries*. Harvard Business Press.
Porter, M.E. (1990), *The Competitive Advantage of Nations*. New York: Free Press.
Roberts, M.J. and J.R. Tybout (1997), "The Decision to Export in Colombia: An Empirical Model of Entry with Sunk Costs", *The American Economic Review*, 87(4), 545-564.
Samiee, S. and P.G. Walters (1990), "Influence of Firm Size on Export Planning and Performance", *Journal of Business Research*, 20(3), 235-248.
Yeoh, P.L. (2004), "International Learning: Antecedents and Performance Implications among Newly Internationalizing Companies in an Exporting Context", *International Marketing Review*, 21(4/5), 511-535.
Zahra, S.A., D.O. Neubaum and M. Huse (1997), "The Effect of the Environment on Export Performance among Telecommunications New Ventures", *Entrepreneurship Theory and Practice*, 22(1), 25-46.