

COMPETITIVENESS DATABASE OF EXPORTERS  
GREECE  
SURVEY RESULTS

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## SURVEY RESEARCH

Competitiveness Database of Exporters – Greece (CODEX-Greece) is a research project that focuses on Greek exporting firms and aims at studying: (a) the determinants of exporting and (b) the relationship between innovation and trade. The research was conducted at the Laboratory of International Economic Relations, Athens University of Economics and Business. Part of the CODEX-Greece is a survey designed to collect data at the firm level with a view to provide evidence on several areas of innovation and internationalization.

The questionnaire is designed with a strong emphasis on ensuring that it is easily understandable and sophisticated enough to deliver high-quality outcomes. Parts of the questionnaire consist of items covered in previous studies, allowing relative comparability with survey evidence from other countries, while it also includes items not covered in prior studies. The survey research aims to collect data on Greek exporting firms characteristics and competencies, exporting activities and innovation activities. The questionnaire covers key aspects of firms operations: export determinants, obstacles to internationalisation, internationalisation support, obstacles to innovation, effects of wage costs.

The questionnaire was thoroughly reviewed by people competent to provide suggestions for improvements. Minor changes in the wording were made after a pretest of the revised questionnaire was conducted with a small number of exporting firms (not included in the sample). Subsequent pilot testing resulted in no significant changes. The questionnaire was initially developed in English and then translated into Greek to conduct the survey. The research was conducted via telephone interviewing by specialised researchers. The approximate time needed for an interview was 15 minutes. All interviewers were individuals with an academic background in economics at a postgraduate level. Survey interviewers received a full briefing prior to fieldwork with a view to ensuring that they (a) understood the general framework of the study, (b) were fully knowledgeable of the terms and concepts used in the survey research. The interviews were conducted with the person in the firm most informed about and/or responsible for its export activities. To ensure the confidentiality of the responses, the survey participants were informed of the academic purpose of the research. The interviews were conducted during standard working hours, while follow-up appointments were made in cases where the respondents were unable to participate in the survey at first contact.

The survey's sample was drawn from the ICAP list of exporting industries. Access to the database was provided via the library of Athens University of Economics and Business. The ICAP database coverage is of high quality and includes information on a variety of firms' features. A key objective of the research is to ensure coverage of firms' age, which is an important feature of its exporting performance. In addition, firm age is also of special interest in the Greek context given the magnitude of the economic crisis, as the more recent business environment differs substantially compared to that of the previous period.

The sample design involves stratifying the sample by three meaningful time periods:

- firms established during the economic crisis (2008 onwards),
- firms established between the adoption of euro and the crisis (2001-2007),
- firms established before the adoption of the euro (before 2001).

Firms established during the economic crisis were slightly over-sampled to ensure that sufficient firms are included for this category.

A single wave of the survey has been completed to date. The survey fieldwork ran from 25th July to 18th November 2019. The study considers 350 exporting firms.

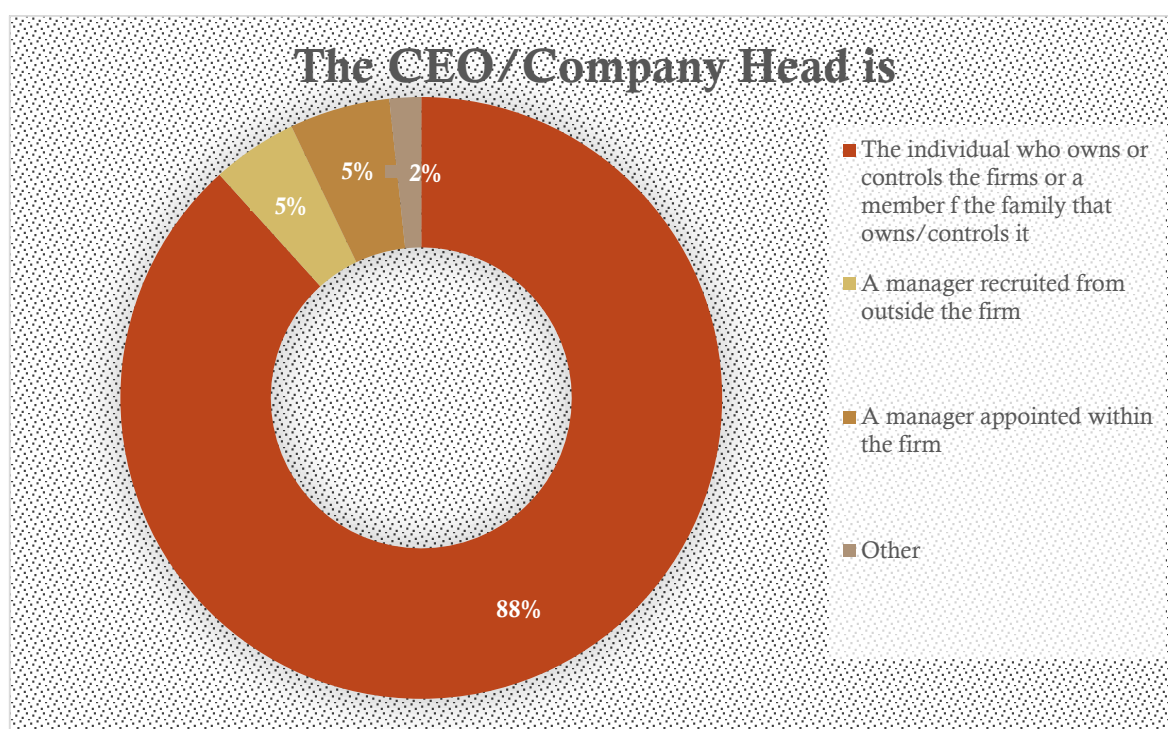
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## KEY FINDINGS

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### EXPORTING FIRM CHARACTERISTICS

Exporting is a costly and demanding activity. Firms involved in exporting activity are usually larger, more productive, more skill intensive, and more innovative than non-exporting ones, in European countries. Small and medium- sized firms with less than 50 employees account for the 80 percent of respondents. The turnover of the firms was, in most cases, lower than 2 mn Euros in 2018. More specifically, slightly over 30 percent of the firms had a turnover up to 500k, another 30 percent a turnover up to 2 mn Euros, while 5 percent of the firms answered that they have a turnover over 5 mn Euros in 2018. The CEO/Company Head for the vast majority of the firms questioned is the same individual who owns or controls the firm, or a member of the same family.



Over 60 percent of the Greek exporters experienced a turnover increase for the years 2017-2018, and 2018-2019. In detail, slightly less than 20 percent of Greek exporting firms increased their turnover either 10 or 20 percent, and a little higher than 10 percent of the participant firms experienced an increase of more than 20 percent of their turnover over these couple of years. One third of this percentage presented a more than 20 percent decrease in their turnovers over the same years.

The age of an exporting firm plays an important role in both export decisions and innovation. More than 80 percent of exporting firms have been established before 2010, while less than 3 percent of them have been in business for less than three years. The principal activity of surveyed firms is manufacturing (over 70 percent), followed by agriculture accounting for 5 percent, and mining for 3 percent. The main exporting activity of Greek

firms is goods for final consumption (over 70 percent), exports of intermediates goods (around 15 percent) and raw materials follow with much lower percentages.

Turnover (mn Euros)	
< 2	65%
2 - 10	17%
10 - 50	9%
> 50	5%
DK/DA	4%
Exporting (years)	
< 3	5.7%
4-6	14.3%
7-10	13.4%
> 10	66%
DK/DA	0.6%
Main exporting activity	
Goods for final consumption	76.9%
Intermediate goods	16%
Raw materials	6%
Other	0.6%
DK/DA	0.6%

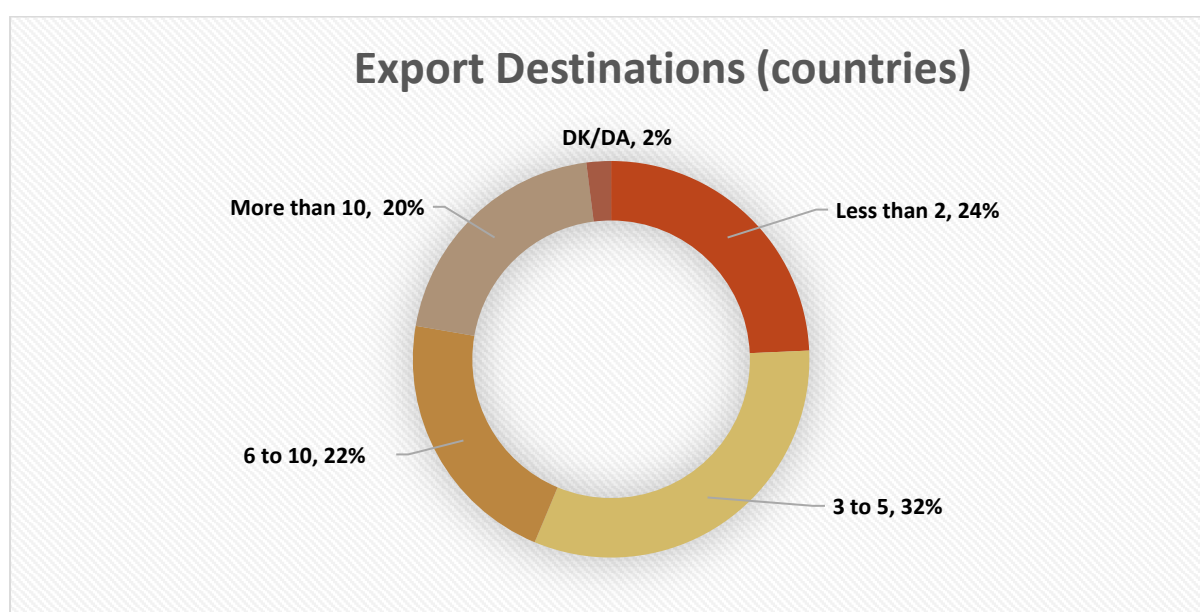
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- **Most of the examined firms are family businesses (almost 90%)**
- **Most firms have a turnover up to 2 million euros (over 60%)**
- **Firms that employ more than 250 people account for only 2% of respondents**

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## EXPORTING FIRMS PERFORMANCE

It is a common fact in international trade literature that most firms export to a few and not long-distance countries. Exporting firms' geographical reach primarily depends on their size. In the case of Greece, given that exporters are mainly small- and medium-sized firms, we expect this geographical reach to be limited. Greek exporters responses show that in a percentage of 24 points they export their products to less than 2 countries; 32 percent export to 3 to 5 destinations, slightly above 20 percent destine their products to 6 to 10 partner countries, and finally, around 20 percent of Greek firms report exporting activities to more than 10 destination countries. Greek exports are mainly directed to Eurozone and European Union Member countries, also to other European countries, and fewer are directed to the USA, Asian, and African countries. Other considerable destination markets for Greek products are Canada and Russia.



Examining the export performance in terms of value change over the period 2014-2019, we find that most Greek exporters experienced an increase in their export value (60 percent). Focusing on the years 2017-2018 and 2018 - 2019, more than half of the firms have increased their exports. Another important measure of firms' exporting activity is the share of their export value over their total turnover. According to Greek exporters, the percentage share of their turnover in 2018 accounted for by exports is categorized as follows; over 35 percent of firms answered that the percentage of their turnover accounted for by their exports reaches 20 percent, slightly over 20 percent of the firms claimed that their exports correspond to 20-40 percent of their turnover, while almost four out of ten (37 percent) exporting firms approximated the percentage share of their turnover accounted for by their exports to be over 40 percent.



### Export Intensity by Destination

Export Destination		Up to 20%	20%-40%	40%-60%	60%-80%	80%-100%	0%	DK/DA
Eurozone	83.7%	14%	10%	18.6%	16%	25.1%	12%	4.3%
EU outside Eurozone	45%	24.3%	8.6%	4.9%	2.9%	4.3%	49.7%	5.4%
Europe outside EU	26.6%	16.9%	4.6%	2.3%	1.7%	1.1%	68.6%	4.9%
USA	22.2%	12.6%	5.4%	1.1%	1.7%	1.4%	71.1%	6.6%
Canada	8.3%	7.1%	0.6%	0.3%	0.3%	0%	84.6%	7.1%
Russia	7.7%	5.1%	1.1%	0.6%	0.9%	0%	86%	6.3%
China	7.4%	5.4%	1.4%	0.3%	0.3%	0%	86.3%	6.3%
Asia outside China	25.1%	15.4%	4.6%	3.1%	0.9%	1.1%	69.1%	5.7%
Africa	14.1%	10.3%	2%	0.9%	0.6%	0.3%	79.4%	6.6%
Rest of the World	20.3%	10.9%	7.1%	1.4%	0.6%	0.3%	73.7%	6%

### Export Value Change

	2017-2018	2014-2019	2018-2019
Increase	59.4%	59.4%	53.4%
Remain same	19.7%	9.7%	27.4%
Decrease	11.4%	1.1%	13.4%
DK/DA	9.4%	20.0%	5.7%

### Export Intensity

	Share of exports in turnover
<20%	37.1%
20% - 40%	21.1%
> 40%	37.4%
DK/DA	4.3%

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## TRADE FRICTIONS

Firms were asked to evaluate the effect of various factors on their exporting activity in the last year. The available responses are 1. not at all, 2. little, 3, intermediate, 4. enough and 5. a lot. Corporate taxation and production cost have the highest impact on exporting activity (mean ranking close to 4).

Unfair competition/commercial practices, lack of information for international demand/ competition, Greece's image/reputation abroad, lack of state/ European corporate funding programs, foreign competition demand for the firm's goods/services, insufficient bank financing and lack of distribution networks abroad follow closely one to the other with mean values between 3 and 2.5.

The mean values are lower (between 2.4 and 1.7) for the lack of qualified staff, the delays in payment of state debts to the firm, the difficulties the firms face in understanding the regulatory/legal framework of exports, the euro exchange rate, the existence of any problems with a firm's payoffs, and the existence of any difficulties in protecting intellectual property follow. Finally, the least affecting factor is the presence of any language or cultural issues. Other factors that according to Greek exporters have affected their exporting activity in the year 2018, are bureaucracy, transportation and infrastructure, global economy/ competition, regulatory/legal issues, mentality, and capital controls.

### Factors that affected firm's export activity

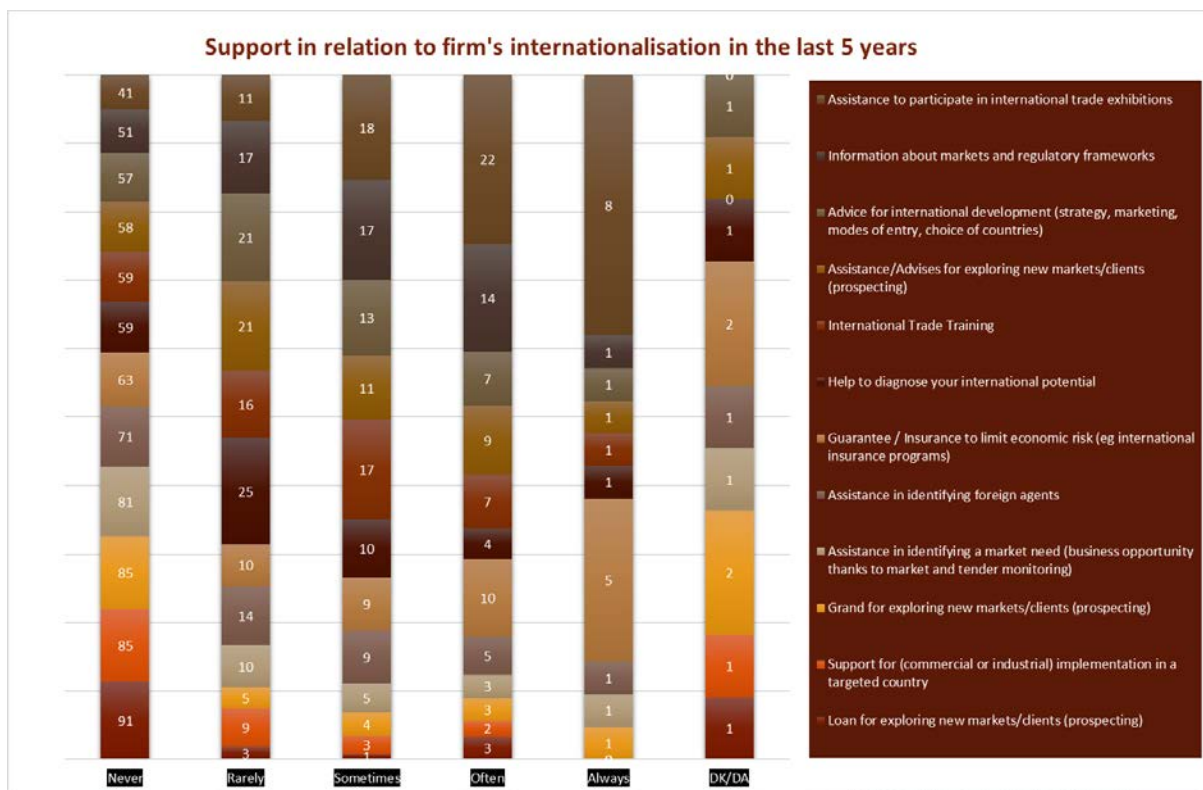
(scale 1. not at all – 5. a lot)

Factor	mean	enough & a lot
Corporate Tax (High)	4.0	76%
Production cost (compared to international competition)	3.7	62%
Unfair competition/commercial practises	3.0	44%
Lack of information for international demand/competition	2.8	36%
Greece's image/reputation abroad	2.7	34%
Lack of State/European corporate funding programs	2.7	35%
Foreign consumption demand for firm's goods/services	2.6	29%
Insufficient bank financing	2.6	30%
Lack of distribution networks abroad	2.5	32%
Lack of qualified staff	2.4	26%
Delays in payment of state debts to the firm	2.3	26%
Difficulties in understanding the regulatory/legal framework of exports	2.1	18%
Euro exchange rate	1.9	11%
Problems with firm's payoffs (partial /delays)	1.9	15%
Difficulties in protecting firm's intellectual property	1.7	11%
Language/Cultural issues	1.4	4%

- Taxation and production cost have the highest impact on exporting activity

## INTERNATIONALISATION SUPPORT

Firms were asked how often they have received specific supportive services in relation to their internationalisation during the last 5 years. Most firms have not received any support in relation to their internationalisation during the last five years. The most frequently used internationalisation support are information about markets / regulatory frameworks and advice for international development.

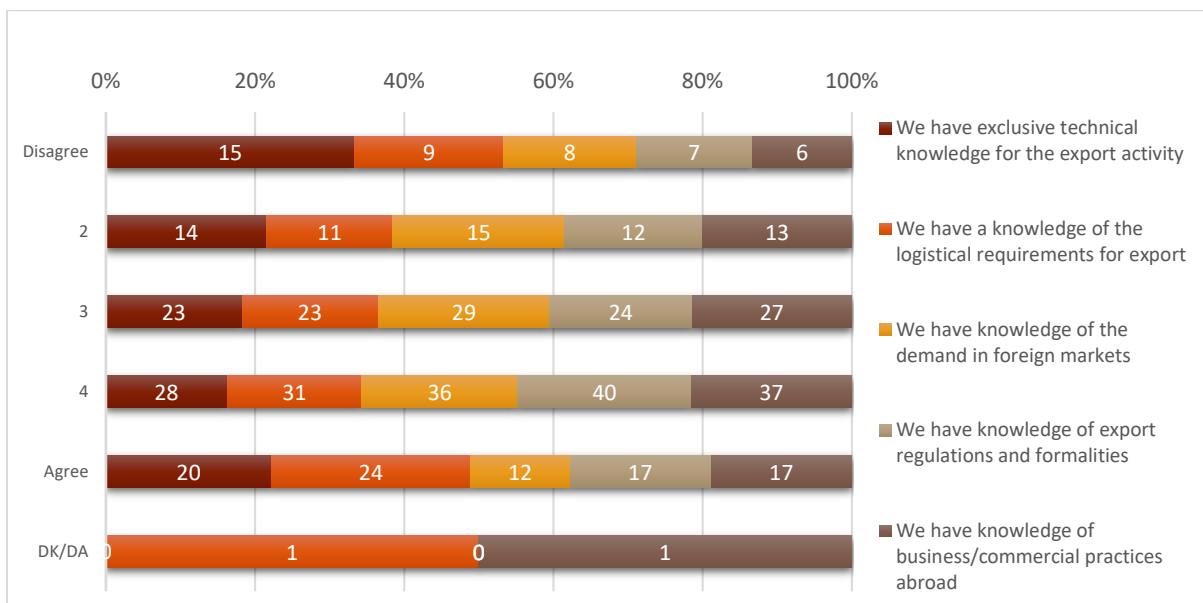
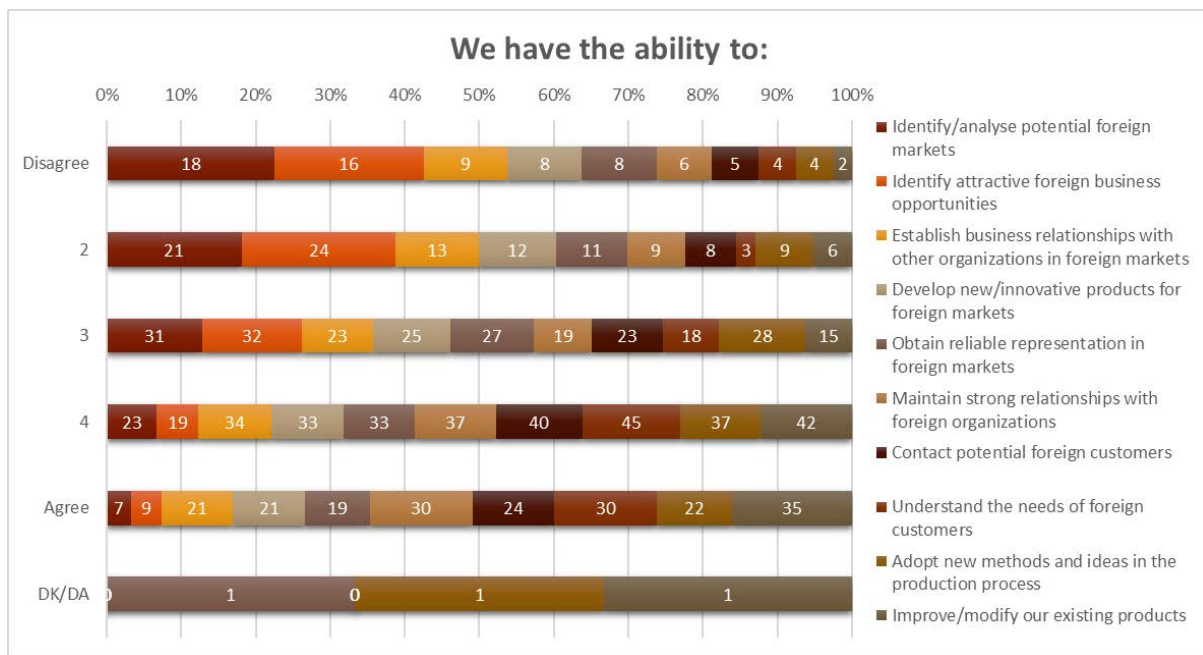


Chambers play an important role in Greek firms' internationalisation. Chambers is the response with the highest percentage in an open question about who would go if respondent firms needed support or advice about exporting. Moreover, chambers have the highest share in the frequency of cooperation with firms in relation to their internationalisation, in the last 5 years.

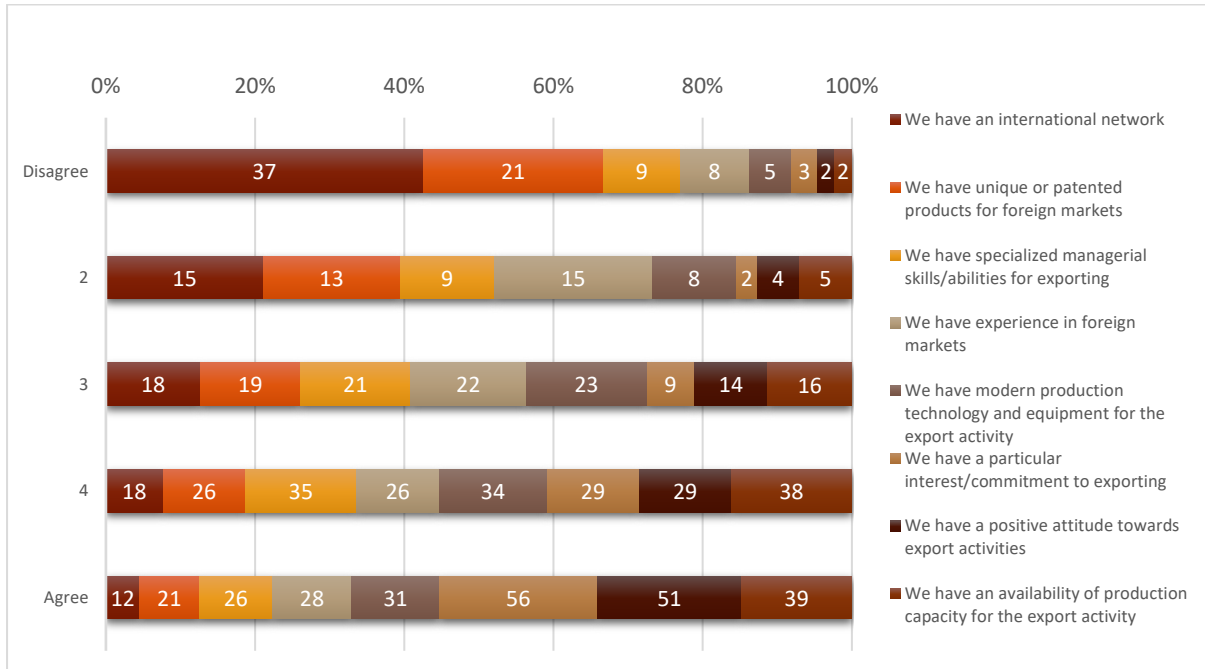
- **Most firms have not received any support in relation to their internationalisation during the last five years**
- **The most frequently used internationalisation support services are information about markets and regulatory frameworks and advice for international development**
- **Chambers play an important role in providing support to Greek firms for going international**

## ABILITIES AND COMPETENCIES

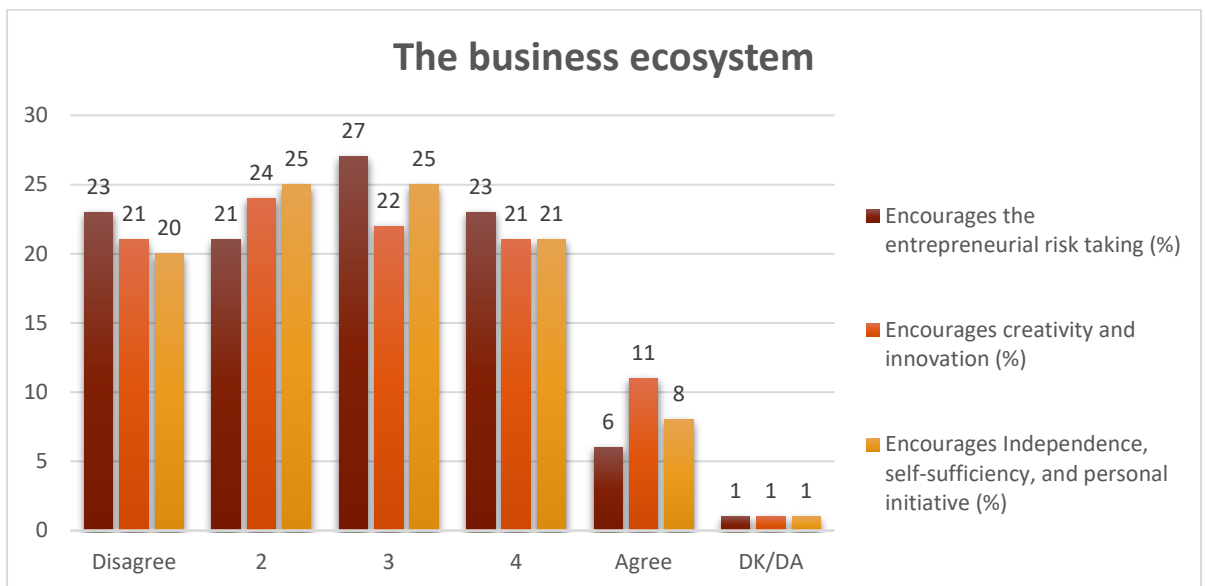
Exporting firms were asked a series of 'agree/disagree' (scale range from 1. disagree to 5. agree) question items regarding their ability to undertake various tasks that are important for their internationalisation. The results indicate that exporting firms are able to improve/modify their existing products, adopt new methods and ideas in the production process, and also understand foreign customers' needs. The identification of attractive foreign business opportunities and the analysis of potential foreign markets are the most difficult tasks for Greek exporting firms. According to the survey findings, a large share of Greek exporters does not have an international network.



Almost three out of ten firms do not have exclusive technical knowledge for the export activity (responses 1 and 2 in the disagreement/agreement scale range). About one in five exporting firms is not well informed about the business/commercial practices followed abroad, export regulation and formalities, foreign demand, and logistical requirements.



Almost half of the examined firms (about 45 percent) believe that the business environment in Greece does not encourage (responses 1 and 2 in the disagreement/agreement scale range) entrepreneurial risk taking, independence, self-sufficiency and personal initiative, creativity, and innovation.



- Identification of attractive foreign business opportunities and analysis of potential foreign markets are the tasks that exporting firms are less able to perform
- A large share of Greek exporting firms does not have an international network
- About one in five exporting firms are not well knowledgeable of the business/commercial practices abroad, export regulation and formalities, foreign demand, and logistical requirements
- Almost half of the exporting firms believe that the business environment in Greece does not encourage entrepreneurial risk taking, independence, self-sufficiency and personal initiative, creativity, and innovation

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## WAGE COSTS

Exporters were asked to specify how high is the wage cost in Greece in comparison to their international competition, and also how high are the wages paid by the firm in comparison to the average wage in Greece. Almost four out of ten exporting firms believe that the wage cost in Greece is higher than that of their international competitors'. Moreover, four out of ten exporting firms pay wages that are higher than the average wage in Greece. However, almost half (49 percent) of the exporting firms claim that they pay wages that are almost the same to the average wage in Greece.

In February 2019, the minimum wage was increased by 11 percent (from 580 to 650 euros) and the under-minimum wage was abolished as the wage for 25-years-old employees has increased from 511 to 650 euros. As a result of these changes, Greek exporters were asked whether they have reduced the number of their employees, their working hours or bonuses. A very small number of the firms (about three percent) have reduced their employees, their working hours, or their bonuses due to the increase in the minimum wage.

For all firms under consideration, the new minimum wage did not lead to increased wages for the employees who were receiving a wage that was higher than the new minimum wage. Almost six in ten firms (56 percent) reported that the average cost per working hour has been increased by up to 2 percent as a result of the minimum wage increase.

- **Almost four out of ten exporting firms believe that the wage cost in Greece is higher than that of their international competition**
- **Four in ten exporting firms pay wages that are higher than the average wage in Greece**
- **A very small number of the examined firms (about three percent) have reduced their employees, their working hours, or bonuses due to the increase in the minimum wage in 2019**
- **Almost six in ten firms reported that the average cost per working hour has been increased by up to 2% as a result of the minimum wage increase**

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## INNOVATION ACTIVITIES

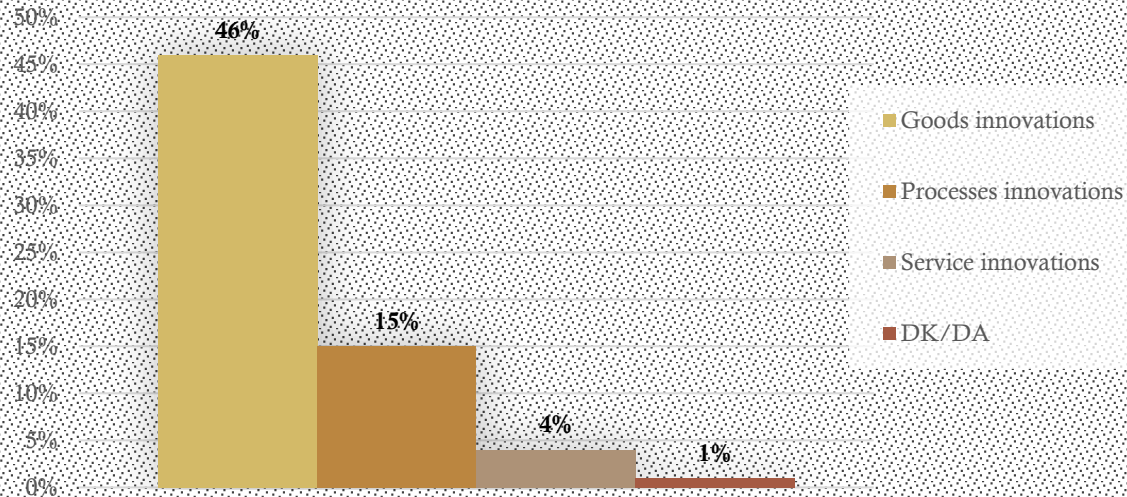
Related literature considers various aspects of innovativeness to define a firm as innovative (e.g., product or process innovation, Research and Development expenditure, patent filing, etc.). Firms that have introduced product or process innovation in the last three years are larger (in terms of employment and turnover) and younger than non-innovative exporters.

Turnover in euros					
		<2m	2-10m	>10m	Total
Goods, Services, or Processes innovation	no	70.1%	19.5%	10.4%	100.0%
	Yes	65.4%	16.2%	18.4%	100.0%
Goods, Services innovations	No	67.4%	18.2%	14.5%	100.0%
	Yes	75.0%	0.0%	25.0%	100.0%
Processes innovations	No	68.2%	17.3%	14.5%	100.0%
	Yes	64.0%	20.0%	16.0%	100.0%

More than half of the exporting firms have introduced product or process innovation in the last three years. When firm representatives were asked whether the introduced innovations have any environmental benefits, one fifth of them gave a positive answer. More than 30 percent of these environmental benefits concern usage of recycling or environmentally friendly materials, another 30 percent about the reduction of waste/ pollution, or the reduction of carbon emission. Less plastic usage, less energy consumption, and better water management have also identified

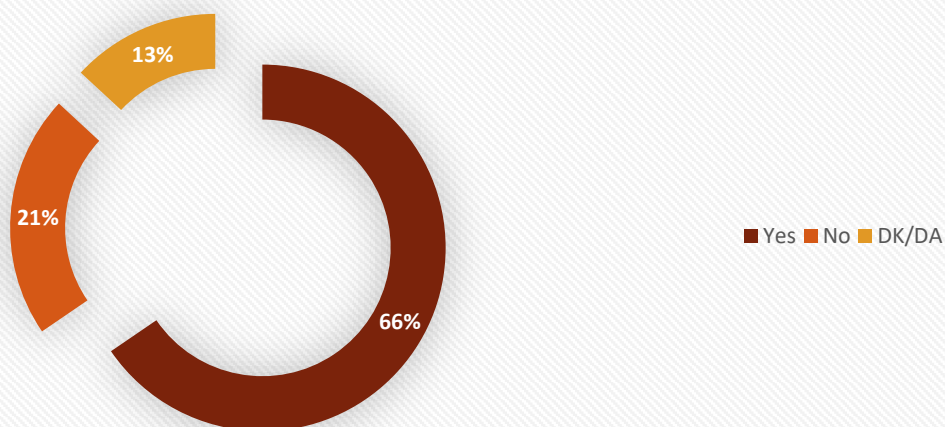


## Innovation during the last 3 years

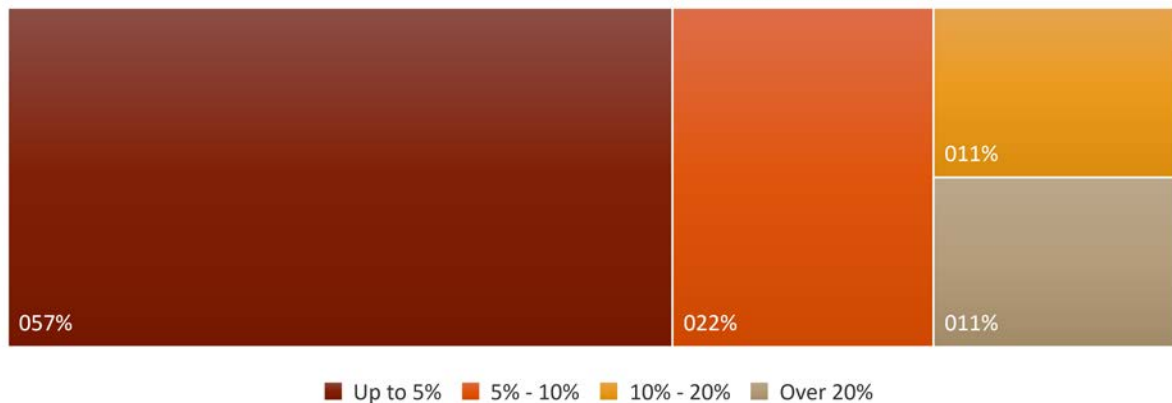


Interestingly, more than half of Greek exporters undertook R&D investments during the last three years. The percentage share of total turnover invested in R&D during this period is up to 5 percent for the majority of exporting firms (57 percent). Concerning patents, less than one out of ten firms has filed -or applied for filing- a Greek patent, and less than 5 percent for an international one in the last ten years. A 5 percent of the firms has filed -or applied for filing- a Greek and international patent. One in five firms have filed -or applied for filing- a Greek trademark, slightly less than 10 percent an international one, and almost 20 percent for Greek and international trademarks. Almost seven in ten exporting firms (65 percent) have at least one International Quality Certification.

## R&D investments during the last 3 years



## Overall, what percentage of your total turnover is invested in R&D during the last 3 years?



- Innovative firms are larger than non-innovative exporting industries
- More than half of the exporting firms have introduced product or process innovation in the last three years
- The percentage share of total turnover invested in R&D is up to 5% for the majority of exporting firms
- The vast majority of exporting firms have not filled or applied for filling any (Greek or International) patents in the last ten years
- Almost half of the exporting firms have filed or applied for filling a Greek or International trademark in the last ten years
- Almost seven in ten exporting firms have at least one International Quality Certification

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## OBSTACLES TO INNOVATION

Exporters were asked to identify the obstacles to their firms' activities related to innovation during the last year. Their first responses were grouped into various factors. Most frequently reported innovation obstacle is the lack/cost of financing (31 percent), followed by taxation (14 percent), and bureaucracy/no state support (10 percent).

Obstacles to innovate:	
Lack/cost of financing	31%
Taxation	14%
Bureaucracy/no state support	10%
High cost	4%
Economic crisis	3%
Banks	3%
Lack of specialized personnel	3%
No information/collaboration with research institutions	2%
Environmental & regulatory restrictions	2%
Mentality/vision	1%
None	9%
Other	12%
DK/DA	7%

High costs, lack of specialized personnel, banks, the economic crisis, environment and regulatory restrictions, no information/collaboration with research institutions, and mentality/vision are among the factors that have been identified by the exporting firms as obstacles to their innovation activities.

- **Most frequently reported innovation obstacle is lack/cost of financing, followed by taxation and bureaucracy/no state support**