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FOUNDATION FOR ECONOMIC & INDUSTRIAL RESEARCH

Τσάμη Καρατάσου 11, 117 42 Αθήνα, Τηλ.: 210 92 11 200-10, Fax: 210 92 33 977, www.iobe.gr
11 Tsami Karatassou, 117 42 Athens, Greece, Tel.: +30 210-9211 200-10, Fax: +30210-9233 977

Manufacturers of marine equipment – trends and prospects for the Greek economy

NOVEMBER 2024

The views on policy issues and the proposals contained in this analysis reflect the opinions of the researchers and do not necessarily represent the views of the members or the Management of IOBE.

The study was conducted by Elias Demian, Konstantinos Kontos, Alexandros Moustakas and Iakinthi Pountouraki, under the coordination of the General Director of IOBE and Professor at the Athens University of Economics and Business, Nikos Vettas.

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Foundation for Economic and Industrial Research (IOBE)

11 Tsami Karatasou str, 117 42 Athens

Tel.: (210 9211200-10), Fax: (210 9228130 & 210 9233977)

E-mail: info@iobe.gr - URL: <http://www.iobe.gr>

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EXECUTIVE SUMMARY

The Hellenic Marine Equipment Manufacturers & Exporters (HEMEXPO) was founded and started operating in 2014, with a continuously growing number of members. Its aim is to actively contribute to enhancing the image of Greek marine equipment manufacturers, both in Greece and internationally, by showcasing the quality and innovation of Greek marine equipment in the global market.

Its member companies design and produce technology and knowledge-intensive products that support the operations, safety and efficiency of ships, while contributing to the decarbonization and digitalization needs of water transport. Their connection with the Greek-owned shipping industry, one of the largest in the world, offers a solid basis for development, while their presence in international markets makes these companies an integral part of the maritime ecosystem and the European blue economy.

Key financial figures

Throughout the 2014-2022 period, most financial figures and indexes of the HEMEXPO companies show a strong upward trend, which temporarily declined in 2020 due to the COVID-19 pandemic. In most cases, the performance of the companies is significantly higher than the average of Greek manufacturing, indicating increased production capacity and competitiveness. In 2022, the total turnover of HEMEXPO companies, which amounted to €677 million, recorded an increase of 22.8% compared to a year earlier, while it more than tripled compared to 2014. Approximately 67.9% of the total turnover comes from sales in water transport. More than half of HEMEXPO companies depend exclusively on shipping, while 70% derive most of their revenue from it. Businesses are extrovert - 39.5% of turnover (approximately €267.9 million in 2022) derives from sales outside Greece. The investment ratio per employee approaches the average for Greek manufacturing, which indicates a significant effort to upgrade the sector's production capacity and know-how, but remains far from the European average.

The impact of HEMEXPO businesses on the Greek economy

Accounting for the interactions with other sectors of the Greek economy, the contribution of HEMEXPO companies, exclusively from sales in Water Transport to the country's main economic figures, is significantly enhanced, creating a total of €389 million in domestic added value in 2022, increased by 29.0% compared to 2021. The total contribution to employment was estimated at 3.2 thousand full-time jobs in 2022, up from 2.9 thousand in 2021 (an increase of 11.5%), while the contribution to fiscal revenue increased to €63 million in 2022 from €46 million in 2021.

When the total activity of HEMEXPO members is taken into account, the contribution to Greek GDP reaches €2.0 billion in 2022, up from €1.4 billion in 2021 (+38.1%). This means that for

every €1 of production value in the sector, approximately €1.3 is created in the entire Greek economy. Accordingly, the total contribution to employment stood at 13.4 thousand full-time jobs, with each job in HEMEXPO companies supporting a total of 4.4 jobs in the Greek economy, highlighting a significant multiplier effect. Finally, the operation of HEMEXPO companies led to the increase of fiscal revenues by €312 million, recording an increase of +36.2% compared to 2021.

Summary table of the impact of HEMEXPO companies on the Greek economy from their activity in the Water Transport sector and their total activity.

Sectors and impact	2021	2022
Water transport sales		
GDP (€ millions)	301,5	389,3
Multiplier	1,3	1,3
Employment (thousands of jobs)	2,9	3,2
Multiplier	3,1	3,3
Public revenue (€ millions)	45,9	63,1
Multiplier	2,2	2,2
Total activity		
GDP (€ millions)	1.417,7	1.958,0
Multiplier	1,4	1,3
Employment (thousands of jobs)	12,4	13,4
Multiplier	4,3	4,4
Public revenue (€ millions)	228,9	311,8
Multiplier	2,4	2,2

Source: HEMEXPO, IOBE estimates

Challenges in the national and international environment

HEMEXPO's marine equipment businesses have managed to maintain a growth trajectory during the 2014-2022 period. However, they are faced with a number of challenges both at the international and national levels. These challenges require targeted actions and strategies in order for the businesses to maintain their competitiveness and ensure their sustainable growth in an ever-changing business and geopolitical environment.

Globally, **protectionist policies in Asia**—such as government subsidies, preferential financing from state banks, and mergers of large state-owned shipbuilding groups—reduce the production costs of Asian shipyards by up to 40%, significantly restricting the ability of non-Asian manufacturers to integrate into their production chains. Today, the presence of Greek

manufacturers in Asian shipyards is primarily attributed to the support of Greek shipowners and their established partnerships with specific Asian shipyards.

At the same time, the lack of a **coherent European strategy for shipbuilding and repair**, combined with the **limited activity of European shipyards** and the **dependence of European shipping on Asian shipyards**, intensifies the challenges for Greek businesses. While significant steps have been made towards recognizing the importance of the broader Blue Economy sector, there is still a lack of a unified strategy as well as the implementation of specific measures that can increase the competitiveness of European shipbuilding, and by extension of Greek marine equipment manufacturing companies, internationally.

Limited access to capital markets continues to pose a significant barrier to financing productive investments that could drive innovation, a challenge further exacerbated by Greece having the fourth highest business borrowing costs in the Eurozone.

At the national level, the **absence of adequate certification and testing infrastructures** hinders the development of innovative products, increases the cost of compliance with international standards, and makes it difficult for international classification societies to accept new technologies developed by the HEMEXPO companies. Furthermore, the existing bureaucratic and licensing framework delays investments, while the slow expansion of organized industrial parks, such as the one in Schisto, creates additional obstacles to business development.

Finally, a persistent challenge for HEMEXPO businesses is the **mismatch between labor supply and demand**, particularly in technical specialties, as the available workforce is insufficient to meet the sector's needs. The needs for specialized technicians and machine operators are particularly high and are constantly increasing, while limited cooperation with educational institutions makes it difficult to prepare a suitable workforce, negatively affecting the competitiveness of the sector.

Policy recommendations

To boost the competitiveness of marine equipment manufacturers, a comprehensive and coherent set of strategic proposals is needed to address existing challenges, establish the necessary institutional and investment framework, and promote their sustainable development.

At European level, the acceleration of the **development of an integrated strategy for shipbuilding and repair** is necessary. This would aim to reduce dependence on Asian countries and enhance the competitiveness of the European shipbuilding ecosystem. In the context of this strategy, the **creation of a European Shipbuilding Fund**, possibly financed by the revenues of the European Emissions Trading System for the maritime sector, could play a central role. This fund would provide resources for the development of shipbuilding activity within the EU,

but also for the penetration of relevant European products in Asian markets, where the majority of shipbuilding takes place. It is necessary to consider providing different forms of financing (e.g. grants, low-interest loans, guarantees) in order to cover the needs of small, medium and large European enterprises.

Furthermore, it is proposed to intensify **diplomatic pressure** through the World Trade Organization to promote fair trade practices and foster strategic alliances with international shipping organizations, such as the International Maritime Organization (IMO).

At the national level, **enhancing certification and testing infrastructures** and considering providing special tax incentives for their development should be a strategic priority. The creation of specialized technological testing centers within Greece will allow marine equipment manufacturing companies, as well as other Greek manufacturing companies, to reduce the cost and time of compliance with international standards, enhancing their ability to develop innovative products. Collaboration between Greek testing centers and their European counterparts will facilitate the transfer of know-how, enhancing the competitiveness of Greek companies.

HEMEXPO companies, despite limited investment resources, have achieved remarkable results, effectively utilizing the available investments. However, maintaining this course requires a **long-term strategy based on continuous investment in innovation, technology and human capital**, in order to cope with international competition. Financing remains a critical factor in achieving the above. The use of **alternative sources** of financing (e.g. green bonds and other sustainable financing mechanisms) can reduce the relatively high cost of borrowing, while providing access to capital on favorable terms for investments in innovative technologies that limit the environmental impact of shipping. A prerequisite is the preparation and publication of non-financial performance reports (e.g. reports that include environmental, social and governance indicators), which improve the investment profile of companies, enhancing their transparency, credibility and attractiveness for sustainability funds.

In addition, it is necessary to consider **tax incentives** that can, under certain conditions, have a neutral or even a positive fiscal impact. Such incentives include increasing depreciation rates and providing special discounts for investments in innovation and exports, enhancing both the productive capabilities of enterprises and their extroversion. Finally, **to increase the participation of Greek enterprises in European funding programs**, such as Horizon Europe, LIFE, and Interreg, support from specialized bodies (e.g., national contact points) is essential, particularly through the provision of technical assistance for preparing competitive proposals. These programs can be a valuable tool for reducing investment risk, promoting sustainability and innovation.

To meet the increased demands and take advantage of the new opportunities arising from increasingly stringent legislation, marine equipment manufacturing companies need to expand their production capacity. **Accelerating licensing procedures**, especially those related to the development and expansion of the production base, is of key importance. Without it, there is a risk of missing out on significant opportunities in a highly competitive international industry. At the same time, **facilitating the expansion of industrial parks**, such as the Schisto Industrial Park, which is home to several HEMEXPO members, and leveraging digitalization in licensing procedures can act as a catalyst for attracting new investments and further supporting existing businesses.

Finally, **human capital development** remains crucially important. Collaboration with educational institutions to create specialized curricula and internships will contribute to filling the gap between supply and demand in technical specialties. At the same time, continuous education and training of existing personnel is essential to adapt to the rapidly evolving technological requirements of the maritime industry. By investing in skills and sustainability, HEMEXPO companies can secure their position in international markets, remaining competitive and innovative.

1. SCOPE OF THE STUDY

Greek marine equipment manufacturing companies are called upon to maintain and further enhance their competitiveness in a constantly changing international environment, marked by both challenges and opportunities. Notable examples include the COVID-19 pandemic, which constrained new orders in shipyards, ongoing disruptions in the global electronics supply chain—albeit at a milder pace in 2023—and the increasing demand to reduce the environmental footprint of shipping. These factors are shaping new conditions and challenges, while also presenting opportunities for the further growth of HEMEXPO's business.

The previous two studies on the manufacturing of marine equipment conducted by IOBE focused on the characteristics of firms and their contribution to the Greek economy.¹ During the 2013-2019 period, there was a significant improvement in the financial performance of firms, which in most cases was faster compared to the Greek manufacturing sector. The above picture was reversed in 2020, the first year of the COVID-19 pandemic, when the financial results of HEMEXPO companies were reduced, while remaining at higher levels than those of the previous year.

The aim of the proposed study is to update the assessment of the importance of Greek marine equipment manufacturing firms for the Greek economy for the period 2021-2022, to document the obstacles and challenges faced in the last decade, and to identify existing proposals to enhance their positive trajectory over time.

The next chapter of the study records the trends on key financial indicators for the 2014-2022 period (turnover, exports, employment, etc.). In most cases, the figures are compared with the rest of domestic and European manufacturing.

The third chapter identifies the economic impact of the HEMEXPO companies on the Greek economy. The estimation is made using the input/output model developed for the Greek economy by IOBE, which quantifies the contribution of the firms in terms of production value, GDP, jobs and public revenues, considering the multiplying effects on related sectors and on the Greek economy as a whole. As HEMEXPO companies provide equipment and services not only to the water transport sector but also to other sectors of the Greek economy, the estimation of their economic footprint is done in two dimensions: firstly, the impact of sales to water transport sector and secondly, the overall impact of all their activities on the economy.

Marine equipment manufacturers face a range of challenges that impact their competitiveness and export orientation. These include access to foreign markets, particularly in Asia, obtaining the necessary certifications, and adapting to the increasingly stringent environmental regulations of global shipping. The fourth chapter analyzes these obstacles and presents targeted policy proposals to support the sector's development.

¹ Manufacturers of marine equipment – trends and prospects (2020, 2022). Available at www.iobe.gr

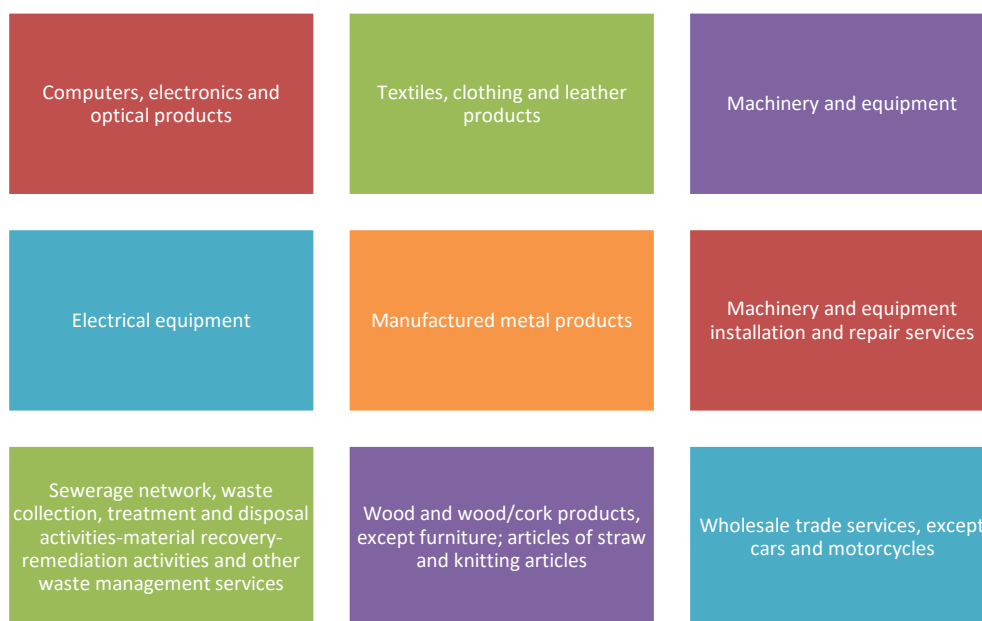
2. KEY FIGURES OF HEMEXPO COMPANIES

2.1 Introduction

This chapter presents the key financial figures of HEMEXPO companies for the 2014-2022 period, with 2022 being the most recent year for which data is available. The relevant financial figures and ratios were compiled using ICAP's database, Data.Prisma, which includes published balance sheets of HEMEXPO companies. Furthermore, as part of this study, a survey was designed and conducted with the participation of 13 HEMEXPO member companies.

HEMEXPO companies are active in the broader manufacturing sector producing products and providing services necessary for the operation of water transport. The manufacturing of marine equipment is a sub-sector of the shipbuilding and repair industry within the European blue economy.² It encompasses activities such as the production of engines and turbines, navigation equipment, testing and navigational instruments, as well as the manufacturing of other essential equipment (e.g., ropes, cords, and related items).

Figure 2.1: HEMEXPO members' activity in sectors of the Greek economy



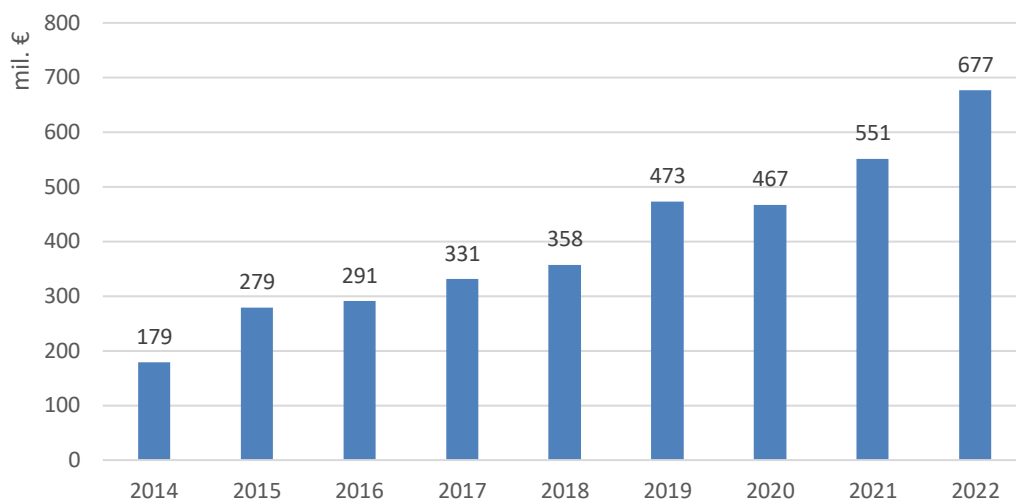
2.2 Key figures

The key financial figures of HEMEXPO businesses are recorded and presented for the period 2014-2022. It is important to note that the cumulative estimates account for the number of HEMEXPO members in each year and exclude members whose financial figures are significantly higher than those of the rest.

² <https://op.europa.eu/en/publication-detail/-/publication/ef90077b-1e82-11ef-a251-01aa75ed71a1>

The turnover of HEMEXPO businesses increased more than 3.5 times over the period 2014-2022, driven both by the rise in the number of members (from 17 to 33) and by the growth achieved within the businesses. In 2022, the most recent year for which data is available, the total turnover of HEMEXPO members reached €677 million, reflecting a 22.8% increase compared to 2021. However, this growth partly reflects the impact of price increases resulting from the Russian war in Ukraine. The temporary effects of COVID-19 were evident in the first year of the pandemic (2020), when turnover declined by 2.95%, interrupting the continuous growth trend observed since 2014 (Figure 2.2).

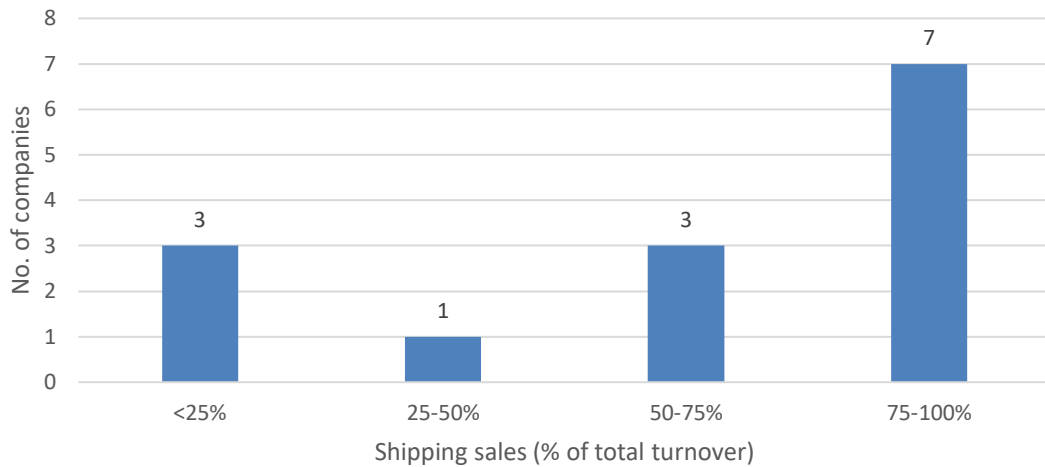
Figure 2.2 HEMEXPO turnover



Source: ICAP Data.Prisma

In addition to the growth of HEMEXPO's businesses, their significant exposure to the shipping industry is particularly noteworthy. According to the survey of IOBE, in 2022, 67.3% of HEMEXPO's total turnover originated from sales exclusively to shipping, up from 65.5% in the previous year. Over the 2014-2022 period, an average of 67.9% of revenues came from shipping-related sales. Notably, for approximately 7 out of 10 companies, more than 50% of their revenues are derived from shipping, while for about 5 out of 10 companies, the shipping industry constitutes their sole customer base (Figure 2.3).

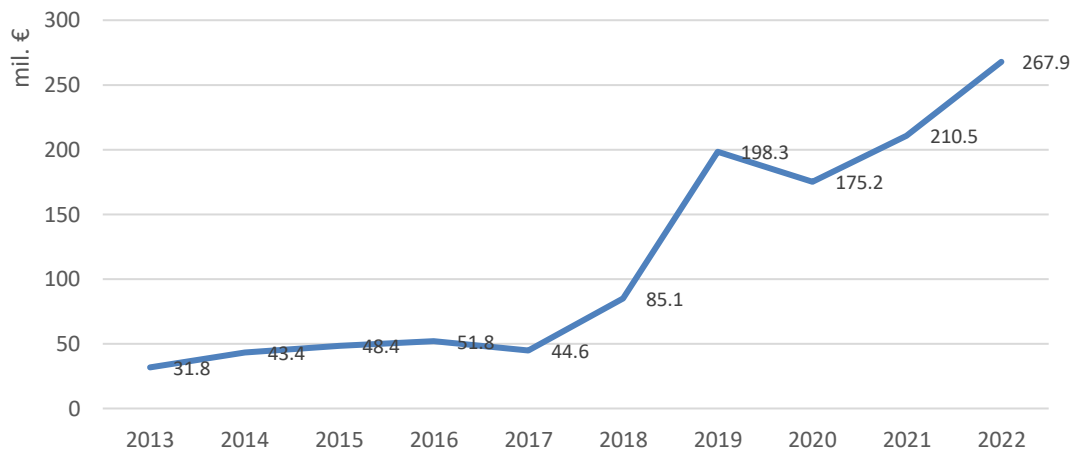
Figure 2.3: Shipping sales, percent of total turnover



Source: IOBE research

Given that water transport, particularly ocean-going shipping, operates on a global scale, it is crucial to highlight the outward orientation of HEMEXPO's businesses in international markets. This extroversion is evident in their export performance, which provides valuable insights into the presence and competitiveness of Greek marine equipment companies abroad. According to data from HEMEXPO companies, both exports as a percentage of turnover and in absolute terms have shown a consistent upward trend, with significant acceleration since 2017. In 2022, exports accounted for over 39.5% of total turnover, reaching €267.9 million.

Figure 2.4 Exports of HEMEXPO companies

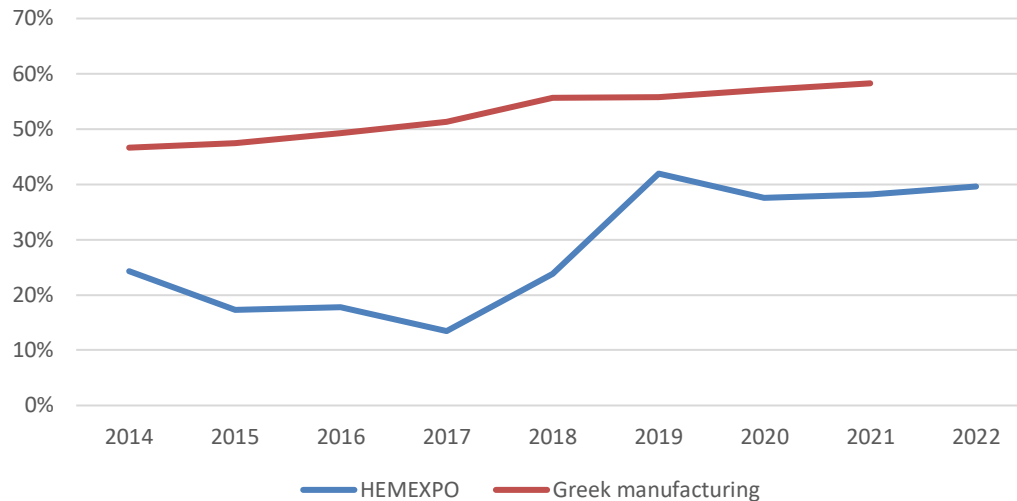


Source: Primary research and data processing by IOBE

Despite the significant growth in recent years, the exports of HEMEXPO companies as a percentage of turnover remain below the average for Greek manufacturing, which stood at 52.7% for the period 2014-2021 (the most recent data available). However, it is important to note that the limited export data for HEMEXPO enterprises may lead to an underestimation

of their total exports, suggesting that the gap from the Greek manufacturing average could be smaller than reported.

Figure 2.5: Exports, percent of turnover



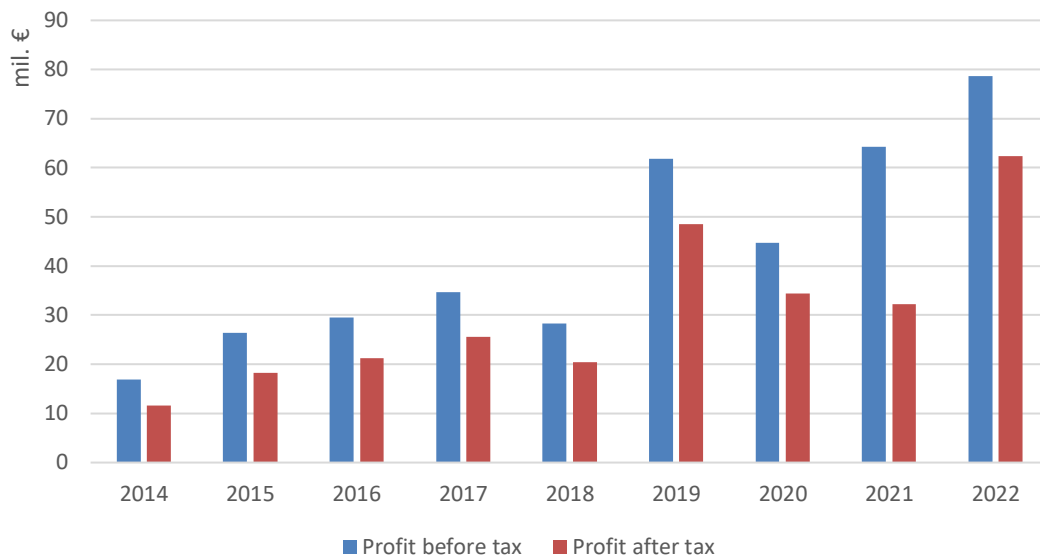
*Unavailable data for manufacturing from the ELSTAT Business Register for 2022.

Source: ELSTAT (Business Register), COMEXT (manufacturing exports), Data.Prisma (HEMEXPO turnover), primary research by IOBE (HEMEXPO exports)

Regarding profitability (Figure 2.6), the pre-tax profits of HEMEXPO businesses show a steady upward trend, which was temporarily interrupted during the COVID-19 pandemic due to challenges in water transport, such as health restrictions on ship docking and reduced demand for transport services. Despite these disruptions, profitability remained robust, exceeding the levels recorded during the 2014-2018 period. In the subsequent years, pre-tax profits resumed their significant growth, reaching €79 million in 2022, equivalent to 9.2% of total turnover.

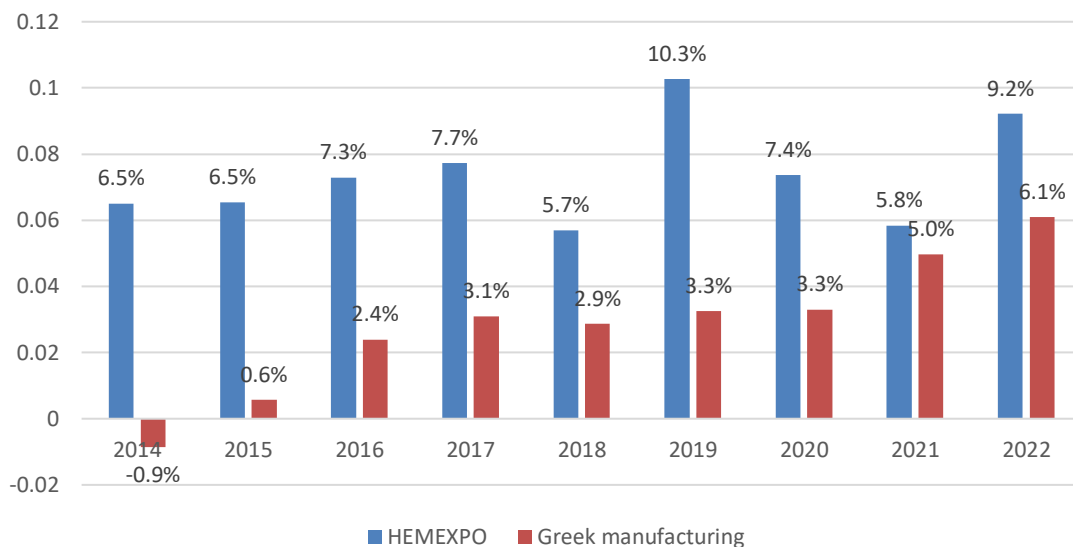
The net profits of HEMEXPO businesses during the period 2014-2022 closely follow the trend of gross profits, with the exception of 2021, when a decrease was observed. Despite the increase in turnover and the reduction in tax rates—first implemented in 2019 and further reduced in 2021—this decline can be attributed to factors such as tax reform adjustments and the addition of costs from previous years. Notably, net profit as a percentage of turnover remained consistently higher than the Greek manufacturing average throughout the 2014-2022 period. This strong performance highlights not only the effective management and strategic decision-making within the industry but also its significant potential for continued growth.

Figure 2.6 Profitability of HEMEXPO companies



Source: ICAP Data.Prisma

Figure 2.7 Net profit (% of turnover)

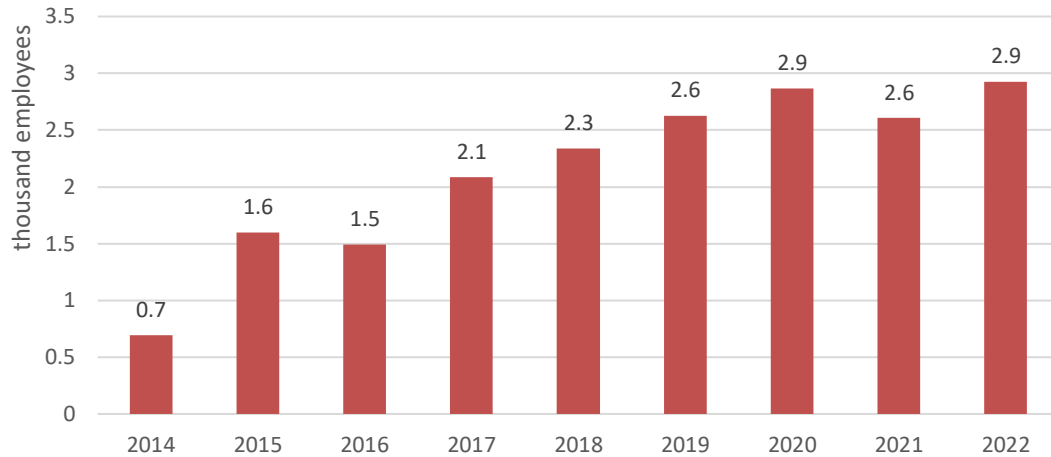


Source: ICAP Data.Prisma

Employment in the sector has demonstrated a steady upward trend since 2016. In 2022, the number of employees reached 2,920, marking a fourfold increase compared to 2014 (Figure 2.8). Notably, during the pandemic, employment levels did not decline, which can be partly attributed to government policies aimed at preserving jobs. The slight decrease observed in 2021 is primarily due to changes in the number of HEMEXPO members rather than a reduction in sectoral activity. The stabilization of employment growth after 2016 indicates a strong and

sustained growth trajectory for the industry, with employment levels remaining high even amid periods of economic uncertainty.

Figure 2.8: Number of employees in HEMEXPO companies



Source: Primary research by IOBE, ICAP Data.Prisma. A large HEMEXPO member has been excluded.

2.3 Figures and ratios

Table 2.1 provides a summary of the financial ratios and relevant indicators for all HEMEXPO members during the period 2014-2022. Overall, the individual ratios exhibit an upward trend, with the impact of the COVID-19 pandemic being limited to 2020. From 2021 onward, HEMEXPO businesses experienced a strong recovery, reaching levels surpassing those of prior years. The following section details the progression of the individual figures and indicators over the study period.

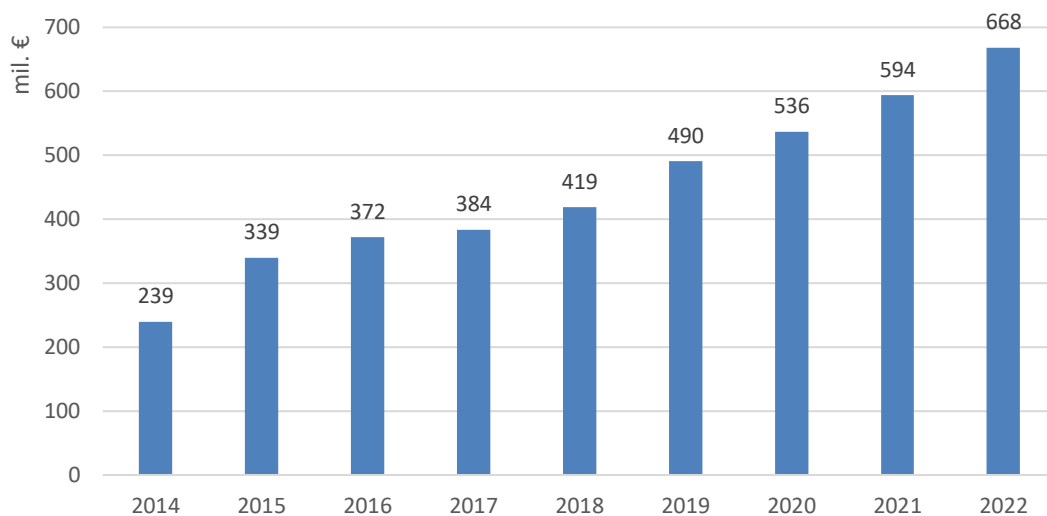
Table 2.1: Summary of key financial figures of HEMEXPO companies

Figure/indicator	2014	2015	2016	2017	2018	2019	2020	2021	2022
Turnover (mil. €)	178,6	279,2	290,8	331,1	357,6	472,7	467,0	551,2	676,9
Cost of goods sold (mil. €)	129,8	197,4	201,5	230,6	254,0	325,1	331,6	391,0	490,1
Net fixed assets (mil. €)	64,2	118,5	127,2	131,9	137,0	158,6	186,2	191,5	210,9
Total assets (mil. €)	239,3	339,4	371,7	383,7	418,6	490,5	536,5	593,7	668,0
EBITDA (εκατ. €)	24,4	36,4	38,9	43,5	39,2	69,4	57,0	77,5	93,8
Profit before tax (mil. €)	17,0	26,4	29,5	34,7	28,3	61,9	44,7	64,3	78,6
Employment	695	1597	1494	2083	2335	2628	2869	2605	2925
Net investment (mil. €)		-18,3	-48,4	-44,2	-7,9	13,0	17,4	-5,5	2,8
Equity (mil. €)	111,3	195,8	217,4	215,9	242,0	290,7	295,9	322,3	371,4

Source: ICAP Data.Prisma

The net asset value (Figure 2.9)—representing the total resources firms utilize to produce and distribute goods and services—grew by 179.4% over the study period from 2014 to 2022. This value exhibits a steady upward trajectory, with a notable acceleration after 2019. The increase in asset value strengthens firms' ability to make further investments, improves access to financing, and enhances their resilience to external shocks and crises.

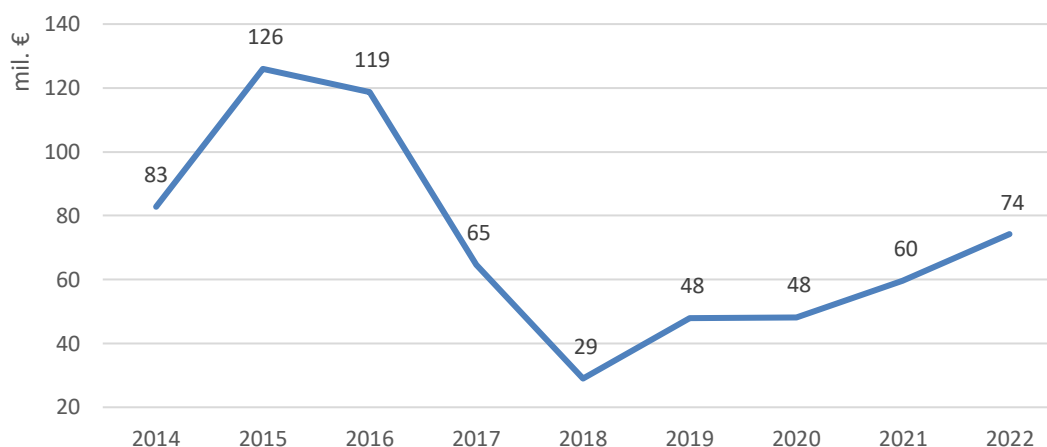
Figure 2.9: HEMEXPO's total assets



Source: ICAP Data.Prisma

Receivables, another key indicator of the financial position of HEMEXPO companies, exhibit fluctuations over the study period (Figure 2.10). Between 2014 and 2018, receivables decreased to €29 million, reflecting shifts in the management of sales collections. This reduction, combined with rising turnover, can also be linked to the capital control measures imposed from 2015 to August 2019. From 2018 onward, receivables gradually increased, reaching €74 million in 2022.

Figure 2.10: HEMEXPO's total claims

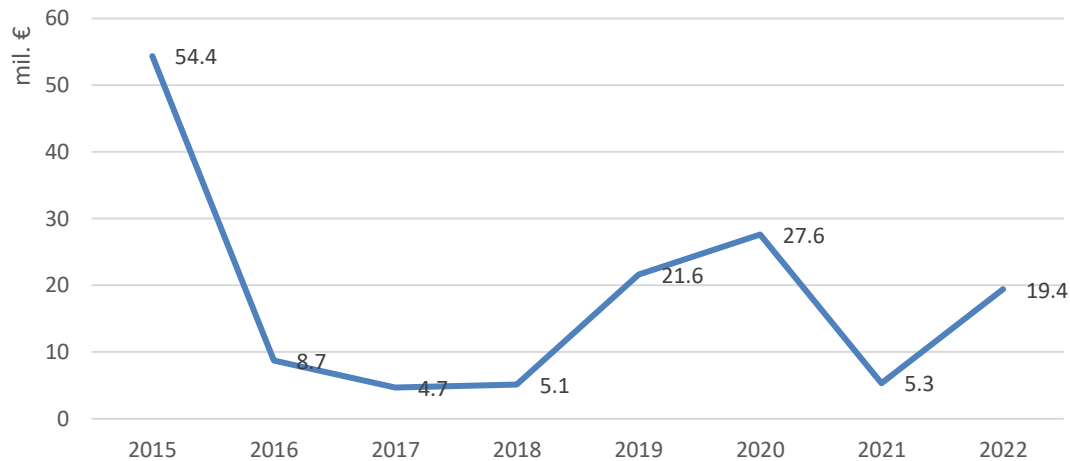


Source: ICAP Data.Prisma

Due to limited data availability, the investments made by HEMEXPO companies over time have been estimated solely through annual changes in their fixed assets. Investment levels declined during 2015-2016 and remained stable at low levels until 2017, with no significant fluctuations. From 2018 onwards, investments began to recover, reaching €19.4 million in 2022. However, it is worth noting a significant decline in investment during 2021, attributed

to the overall slowdown in economic activity caused by the pandemic. This is further evidenced by the nearly fourfold increase in investment in 2022 (Figure 2.12).

Figure 2.11: Investments in HEMEXPO companies

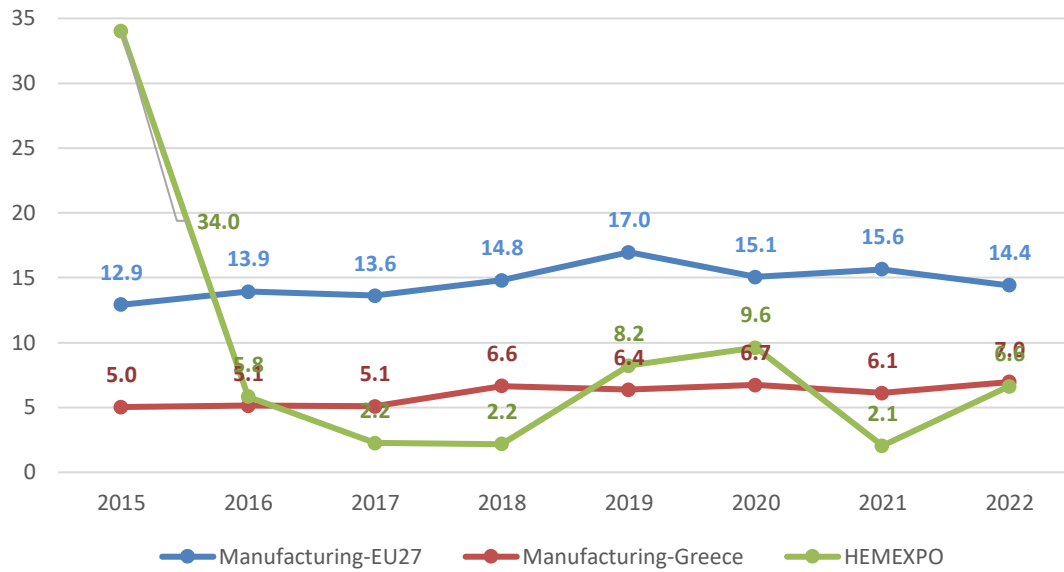


Source: ICAP Data.Prisma, data processing by IOBE

The investment per employee ratio is a key indicator for evaluating the productivity and competitiveness of enterprises. For HEMEXPO companies, this ratio exhibits significant fluctuations during the period 2015-2022, with a sharp decline after 2015—a year marked by a substantial increase in fixed assets—and minor variations in the following years. While the ratio is comparable to the Greek manufacturing average, it remains significantly below the EU27 average. This gap underscores the need to enhance investment levels, not only in HEMEXPO companies but also in Greek manufacturing as a whole, to strengthen productivity and global competitiveness.

Long-term liabilities, which include items such as long-term equipment rentals, loans for real estate and land purchases, and other obligations with maturities exceeding 12 months, increased by 61.3% in 2022 compared to the previous year. Similarly, short-term liabilities—obligations with durations of less than 12 months, such as liabilities to suppliers, accrued expenses, taxes, dividends, and short-term loans—rose by 21.6% in 2021 (Figure 2.13).

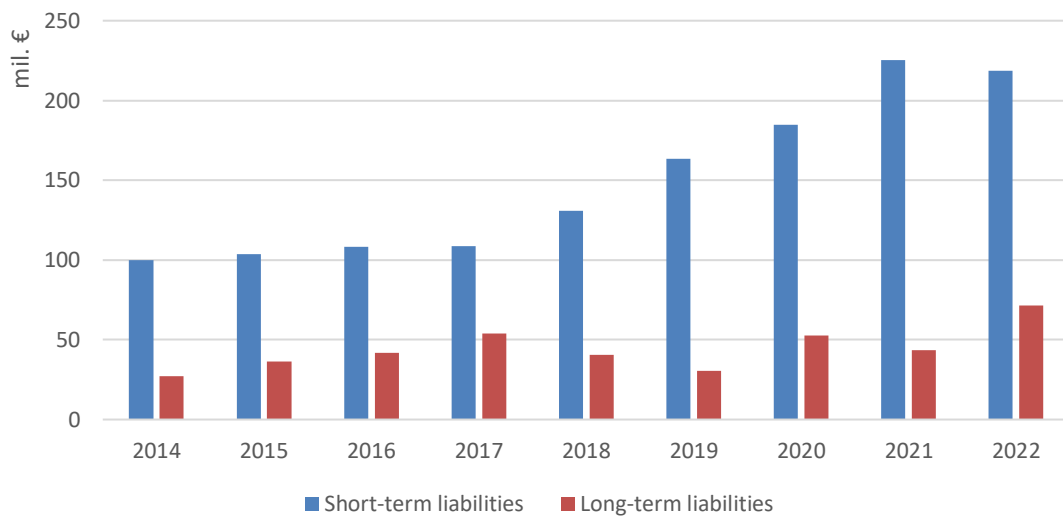
Figure 2.12: Investment per employee in HEMEXPO companies, manufacturing in Greece and in EU-27



Source: Eurostat, Primary research and data processing by IOBE

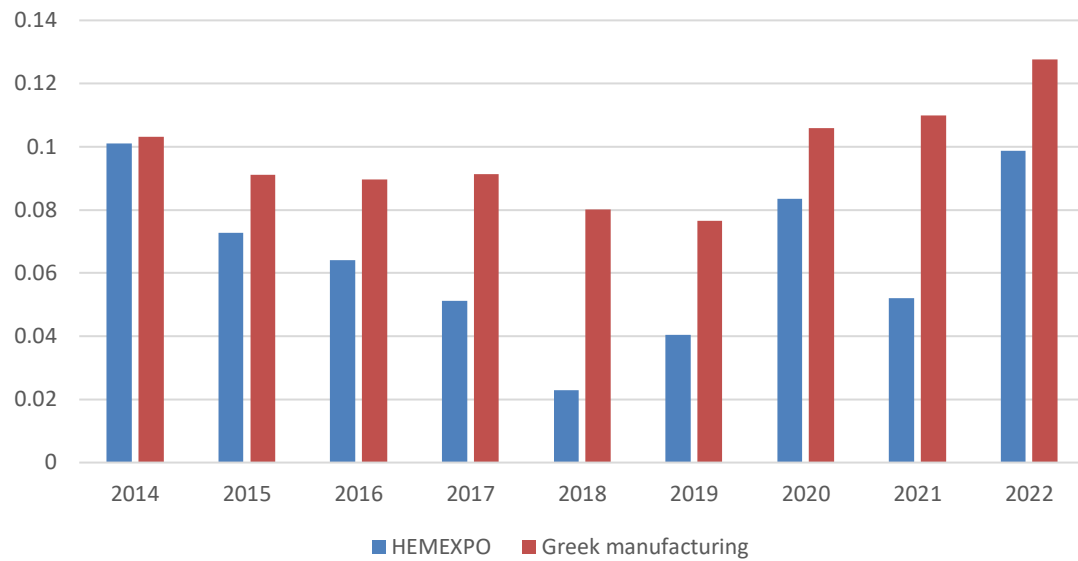
The trend in short-term liabilities appears to be influenced by the increase in the debt ratio observed after 2019 (Figure 2.14), suggesting that part of the rise in liabilities may be attributed to greater reliance on borrowing to address temporary needs. However, it is noteworthy that the debt liabilities of HEMEXPO firms grew at a more moderate pace compared to those in Greek manufacturing overall, reflecting stronger financial stability and, potentially, an enhanced capacity to cover liabilities through internal resources.

Figure 2.13: HEMEXPO's total short- and long-term liabilities



Source: ICAP Data.Prisma

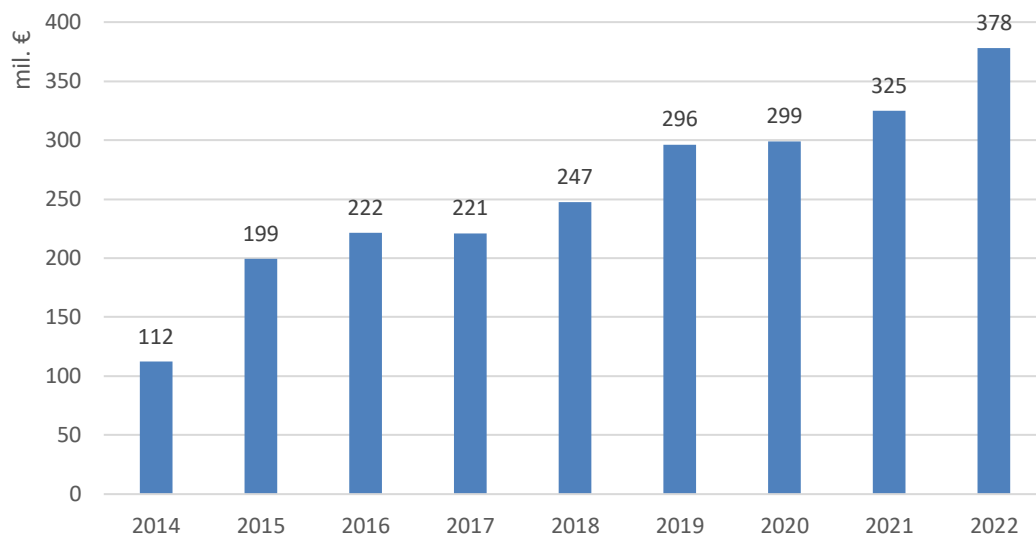
Figure 2.14: Debt burden index of HEMEXPO and Greek manufacturing



Source: ICAP Data.Prisma, data processing by IOBE

The net position of HEMEXPO companies, a key indicator of financial health, represents the value of their assets after deducting total liabilities. Despite the rise in liabilities noted earlier, the growth in total assets has ensured that this indicator remains positive and has consistently increased over the study period. By 2022, the net position reached €378 million, more than tripling since 2014 (Figure 2.15). This growth highlights the overall financial stability and resilience of HEMEXPO companies.

Figure 2.15: HEMEXPO's net worth

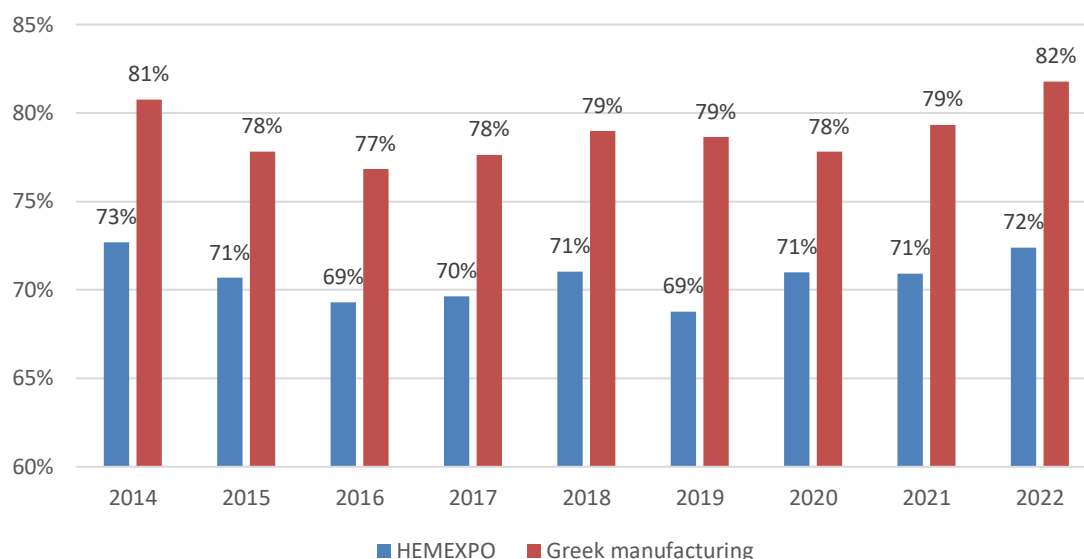


Source: ICAP Data.Prisma, data processing by IOBE

The cost of sales as a percentage of turnover (Figure 2.16) is a critical factor influencing the overall profitability and viability of enterprises. For HEMEXPO firms, this ratio averages 70.7%, significantly lower than the Greek manufacturing average of 79.3% over the same period. This indicates a competitive advantage in operational efficiency for HEMEXPO businesses.

This efficiency allows firms to allocate a greater share of their revenues to investments in innovation and the adoption of sustainable practices. The resulting cost advantage contributes to higher profitability margins, which enhances their financial resilience, even during challenging economic conditions. Furthermore, maintaining a lower cost of sales strengthens the financial viability of these companies and their ability to adapt to market fluctuations, making them more appealing for partnerships and competitive in international markets.

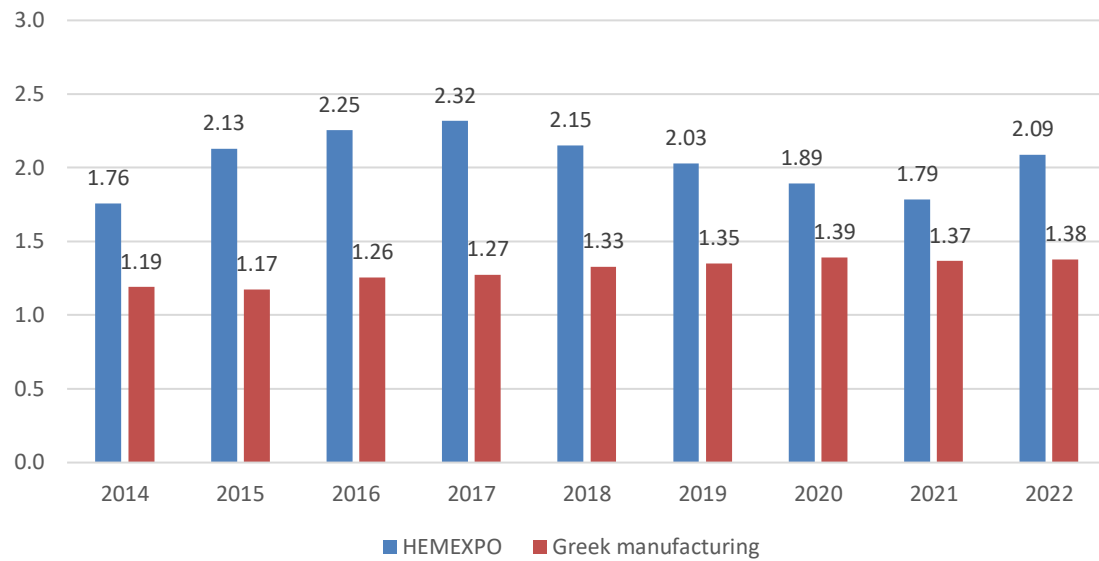
Figure 2.16: Cost of goods sold (HEMEXPO and Greek manufacturing), percent of turnover



Source: ICAP Data.Prisma, data processing by IOBE

The current ratio, which measures a firm's ability to meet short-term liabilities, tightened until 2021 but rebounded in 2022 (Figure 2.17). Throughout the study period, the ratio remained higher than the Greek manufacturing average, with the manufacturing index showing a slow upward trend. Considering the increasing profits of HEMEXPO firms and the relatively stable cost of goods sold, this trend can largely be attributed to the gradual rise in short-term liabilities. This suggests that while firms maintained strong liquidity, their growing reliance on short-term financing has influenced their current ratio dynamics.

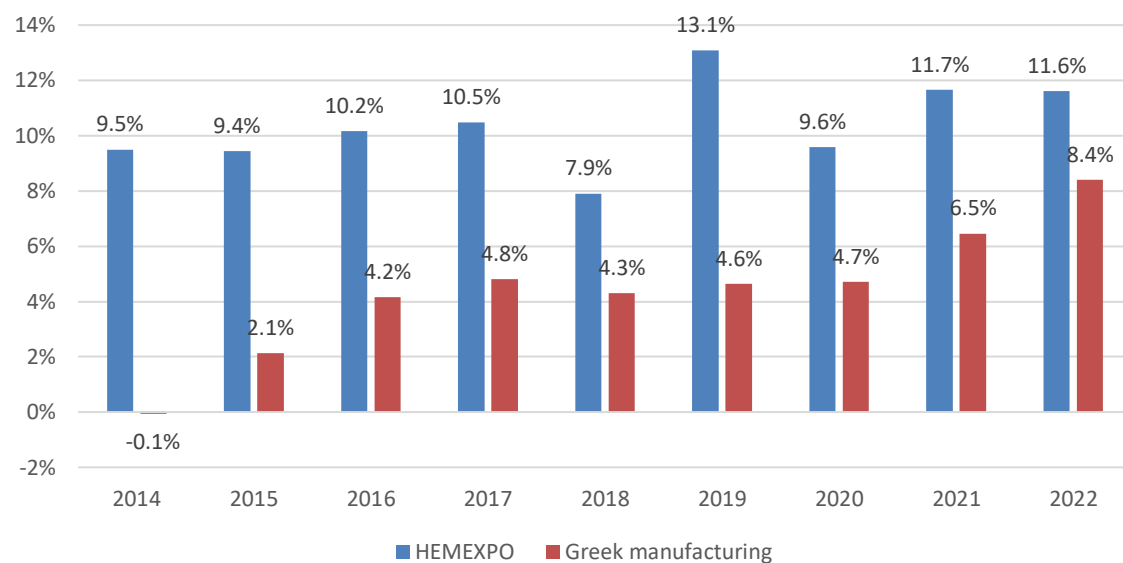
Figure 2.17: Current ratio, HEMEXPO and Greek manufacturing



Source: ICAP Data.Prisma, data processing by IOBE

The net profit margin of HEMEXPO firms showed an overall increase during the study period, except for 2018 and 2020. Over time, it consistently outperformed the corresponding margin of Greek manufacturing, despite some convergence trends observed on the manufacturing side (Figure 2.18). The consistently significant net profit margin highlights the sector's viability and competitiveness, enabling HEMEXPO firms to pursue further investments and foster innovation, reinforcing their position in both domestic and international markets.

Figure 2.18: Before-tax profit margin, HEMEXPO and Greek manufacturing

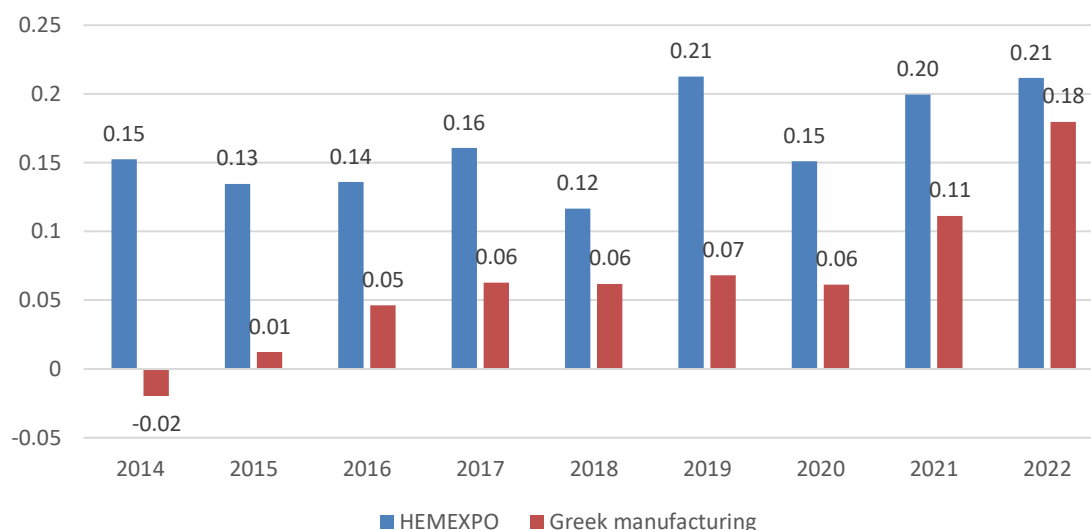


Source: ICAP Data.Prisma, data processing by IOBE

Return on equity (ROE) for HEMEXPO firms has increased significantly since 2019 and remained high, exceeding 21% in 2022. Over time, HEMEXPO firms have consistently demonstrated a higher ROE compared to the manufacturing sector, despite a convergence trend observed in 2022 (Figure 2.18).

The consistently higher ROE indicates that HEMEXPO firms utilize their equity more efficiently than the broader manufacturing sector, achieving superior returns. This distinction can be attributed to their greater specialization and competitiveness, which strengthen their capacity for growth and enhance their long-term viability in the market.

Figure 2.19: Return on equity, HEMEXPO and Greek manufacturing



Source: ICAP Data.Prisma, data processing by IOBE

2.4 Conclusions

Most of HEMEXPO's financial ratios and business indicators show significant growth during the period 2014-2022.

Turnover more than tripled, rising from €179 million in 2014 to €677 million in 2022, driven by both an increase in the number of members and the organic growth of the businesses themselves. The sector's reliance on shipping remains substantial, with 67.9% of turnover derived from sales to the shipping industry, highlighting HEMEXPO's strategic connection to this vital sector.

The impact of COVID-19 was limited, causing only a slight decline in 2020, followed by a robust recovery in subsequent years. HEMEXPO businesses exhibit strong outward orientation, with exports accounting for over 39.5% of turnover in 2022. However, this figure remains below the Greek manufacturing average, potentially due to limited data and underestimation of actual export volumes.

Profitability in the sector has shown a consistent upward trend, with pre-tax profits increasing steadily except during the pandemic period. Both sector profitability and return on equity remain above the Greek manufacturing average, reflecting efficient management and a well-aligned strategic focus.

Lastly, the continuous increase in employment within HEMEXPO companies from 2016 to 2022 highlights the sector's significant social and economic contribution. The sector's robust growth, strong profitability, and export orientation underscore HEMEXPO's sustainability and competitiveness, with considerable potential for further growth and impact on both the Greek and international economic landscape.

3. ECONOMIC IMPACT OF THE HEMEXPO FIRMS

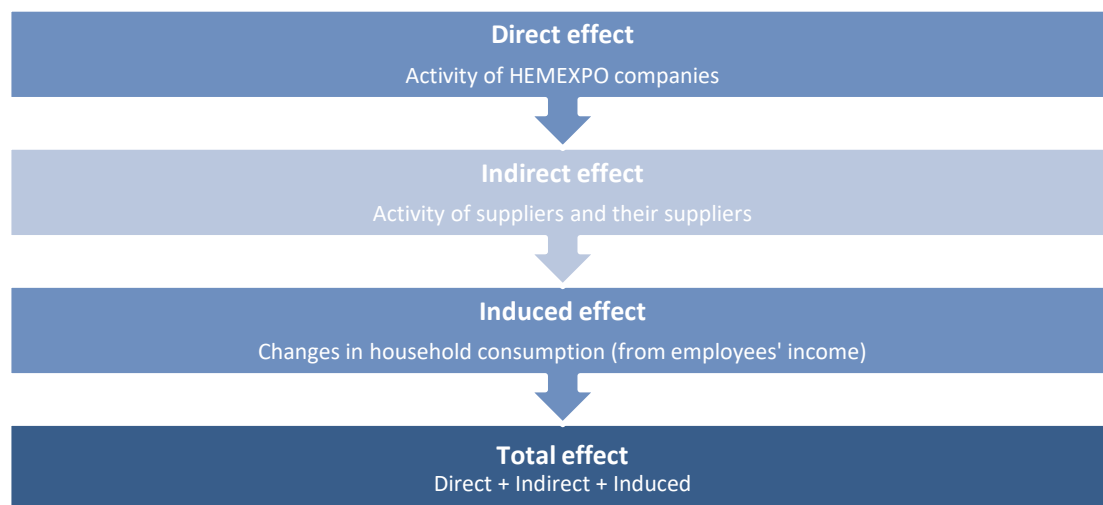
3.1 Introduction

The economic activity of a sector or group of firms is a critical indicator for assessing its broader contribution to the Greek economy. This contribution is analyzed through key economic variables, such as GDP, value added, employment, and government revenues, among others. These variables are evaluated across three dimensions of economic impact: direct, indirect, and induced.

- **Direct impact** refers to the effects generated directly by the operations and activities of the industry or business unit.
- **Indirect impact** arises from economic transactions with suppliers, reflecting the ripple effects along the supply chain.
- **Induced impact** results from household spending of income earned directly or indirectly through the industry's activities.

The **total impact** is the sum of these three dimensions—direct, indirect, and induced—providing a comprehensive understanding of the sector's overall economic contribution.

Figure 3.1: Methodology for estimating the economic impact of HEMEXPO companies



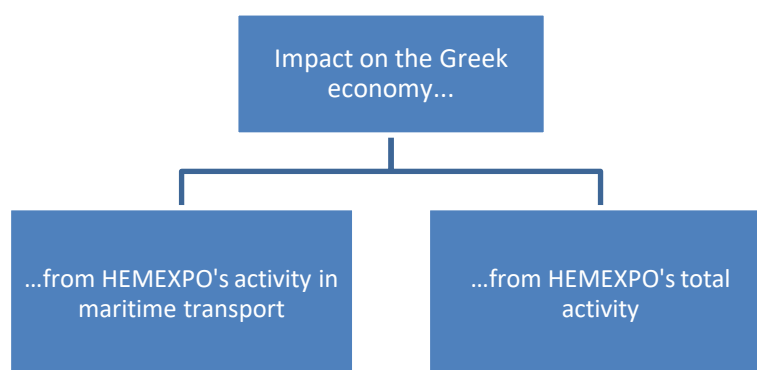
Source: Input/output model, IOBE

In the case of HEMEXPO, the footprint on the Greek economy takes into account the activity of its member companies, as well as their operational and investment expenditures on domestic goods and services for the years 2021-2022, while examining how these activities affect the economy as a whole. The potential losses to the Greek economy's key economic indicators are estimated in the event that HEMEXPO companies cease their operations. The direct and multiplier effects (indirect and induced) are calculated using the input-output

model developed by IOBE for the Greek economy, which considers the interdependencies between economic sectors arising from the activities of HEMEXPO companies.

Although most of the output is directed to the Water Transport sector, many enterprises supply goods and services to other sectors. For this reason, it was deemed necessary to assess both the impact of serving the Water Transport sector in isolation—which in Greece is primarily focused on shipping and coastal shipping—and the overall impact, taking into account the full range of activities of these businesses.

Figure 3.2: Methodology for estimating the impact of HEMEXPO companies on the Greek economy



For this purpose, a quantitative data collection survey was conducted among the businesses of HEMEXPO. The survey aimed to collect information for analyzing the relationships between each company and other sectors of economic activity in the Greek economy (suppliers). The analysis was based on economic data and input-output tables for each year of the study period (2021-2022).

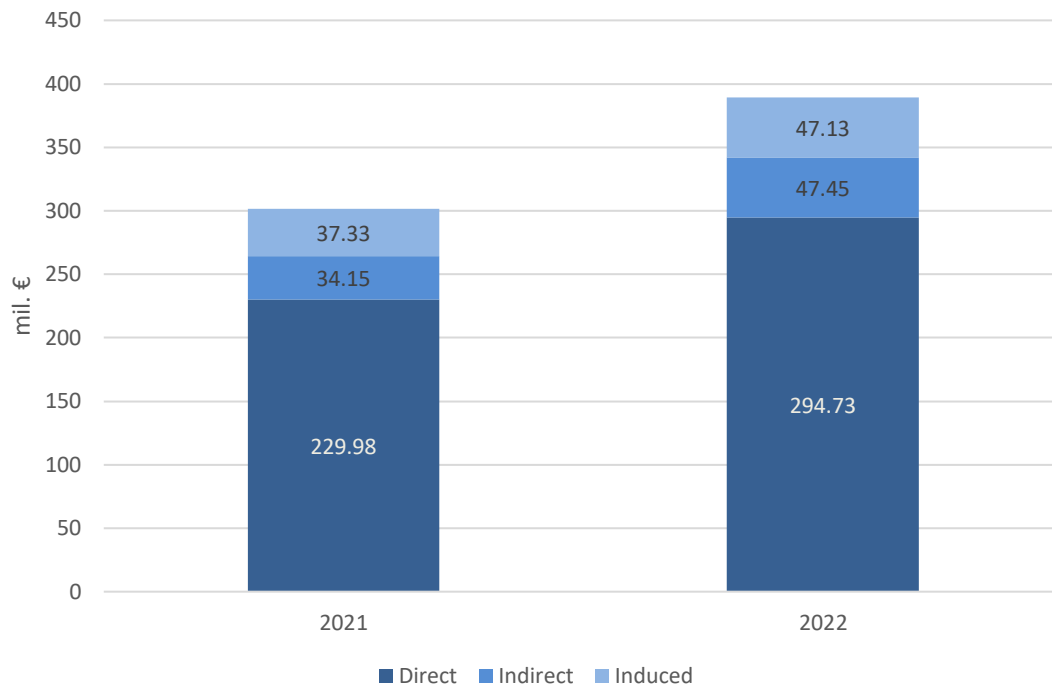
To calculate the economic footprint, data from 21 HEMEXPO member companies were utilized. Of these, thirteen (13) companies provided responses to the data request, while for the remaining eight (8), data were sourced from published financial statements and the Data.Prisma database.

3.2 Estimation of Contribution to the Greek Economy from Sales to the Water Transport Sector

In 2021, considering the multiplier effects of HEMEXPO's businesses and focusing solely on activity from sales to the Water Transport sector (Figure 3.3), the total contribution to GDP was €301.5 million. Specifically, the direct effect accounted for €229.9 million, while meeting the demand for goods and services from HEMEXPO's suppliers added €34.2 million (indirect effect). Additionally, the induced effect on GDP, driven by household spending fueled by wages paid by HEMEXPO businesses and their supply chain, amounted to €37.3 million.

In 2022, the total impact rose to €389.3 million (0.19% of total GDP), reflecting a 29.0% increase compared to 2021. The direct effect increased to €294.7 million, supply chain effects reached €47.5 million, and induced effects amounted to €47.1 million.

Figure 3.3: Contribution to GDP from HEMEXPO's sales to maritime transport, 2021-2022

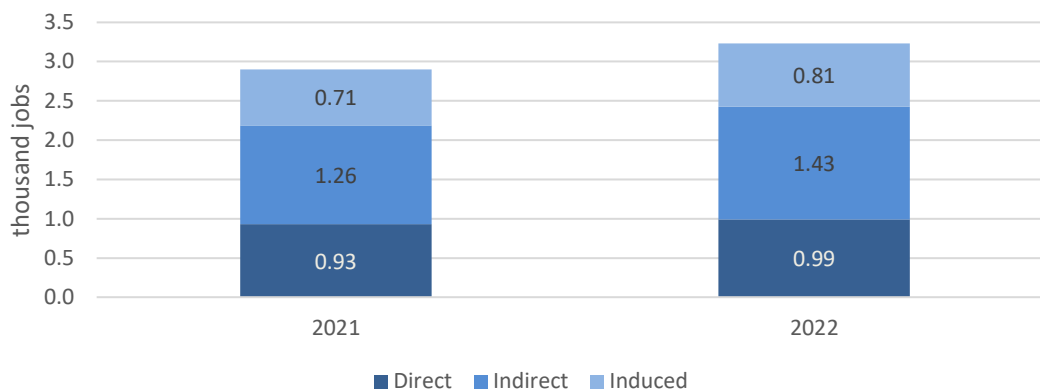


Source: HEMEXPO, IOBE estimations

The employment footprint of water transport activities increased by 11.5% in 2022 compared to 2021, reflecting higher demand for goods and services from HEMEXPO businesses. Including indirect and induced effects, total employment reached 3.2 thousand full-time equivalent jobs in 2022, up from 2.9 thousand in 2021.

Specifically, in 2021, water transport activities supported 934 full-time jobs directly (direct effect), approximately 1.3 thousand jobs along HEMEXPO's supply chain (indirect effect), and 713 full-time jobs from household demand driven by wages provided by HEMEXPO businesses and their supply chain (induced effect). In 2022, water transport activities are estimated to have supported 990 full-time jobs directly (direct effect), approximately 1.4 thousand jobs through supply chain activities (indirect effect), and an additional 813 jobs from household demand fueled by wages (induced effect) (Figure 3.4).

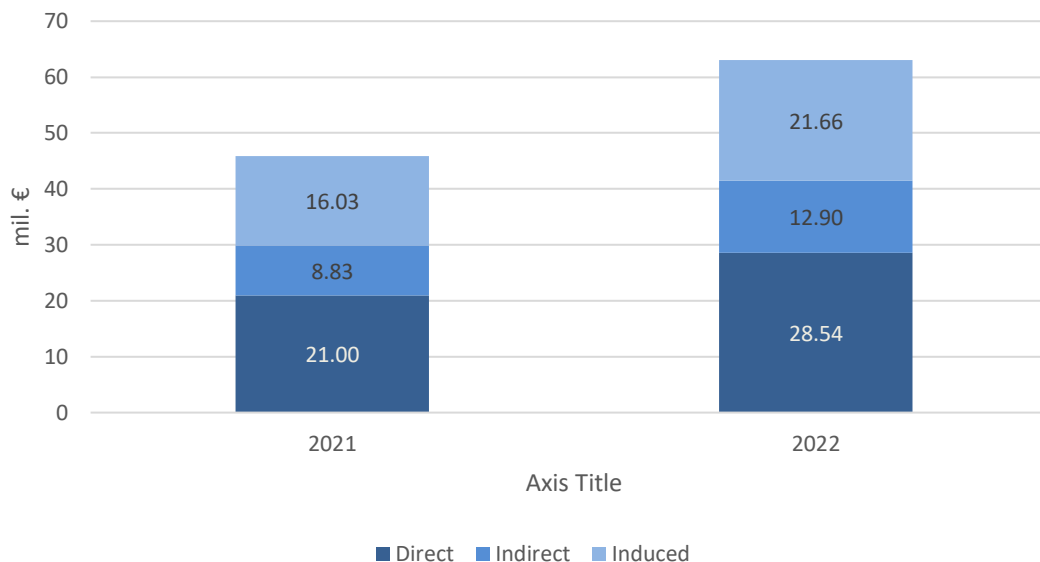
Figure 3.4 Contribution to employment from HEMEXPO's sales to maritime transport, 2021-2022



Source: HEMEXPO, IOBE estimations

The operation of HEMEXPO businesses makes a significant contribution to public revenues through taxes and employer contributions. In 2022, their total contribution from water transport activities rose by 37.6% compared to 2021, reaching €63.1 million. Specifically, in 2021, the direct impact on government revenue amounted to €21.0 million, while the contribution from activities along the supply chain of HEMEXPO businesses (indirect impact) exceeded €8.8 million. Additionally, household spending generated €16.0 million in government revenue (induced impact). Similarly, in 2022, the direct effect increased to €28.5 million, the indirect effect to €12.9 million, and the induced effect to €21.7 million.

Figure 3.5: Contribution to public revenue from HEMEXPO's sales to maritime transport, 2021-2022



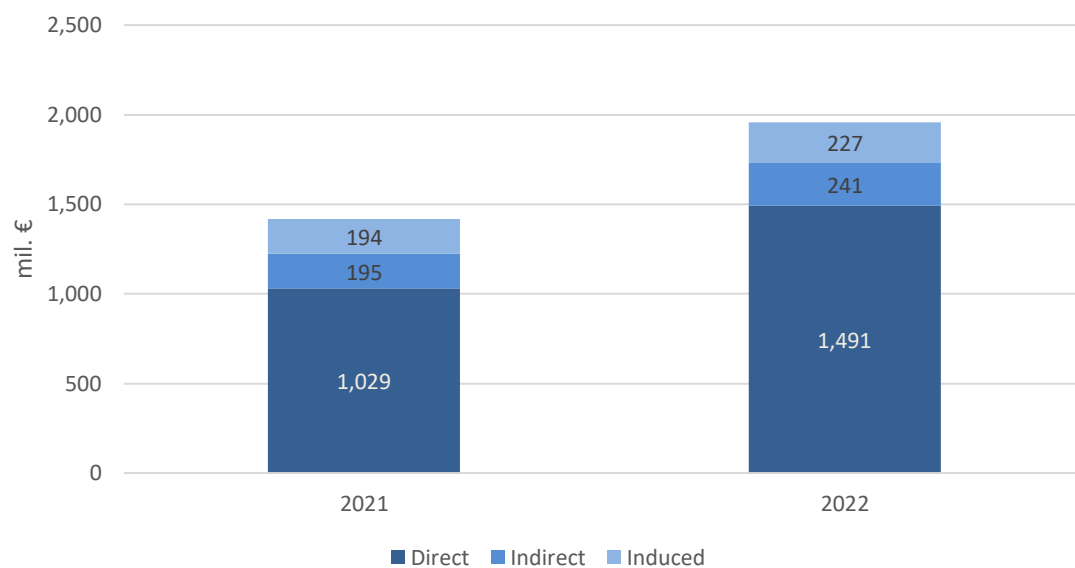
Source: HEMEXPO, IOBE estimations

3.3 Total activity of the HEMEXPO firms - contribution to the Greek Economy

Taking into account the multiplier effects, the total business activity of HEMEXPO in 2021 contributed €1.4 billion to GDP, representing approximately 0.78% of the total GDP of the Greek economy for that year. The direct effect was estimated at €1.0 billion, while approximately €195 million was generated through economic interactions with other sectors of the Greek economy (indirect effect). Additionally, household wage expenditure contributed €194 million (induced effect).

In 2022, the total impact of HEMEXPO businesses on GDP increased significantly by 38.1%, reaching €2.0 billion, or about 0.95% of the country's GDP. The direct impact on the Greek economy amounted to €1.4 billion, with supply chain-related effects contributing €241 million and induced effects accounting for €227 million. Notably, for every €1 of production value in the sector, approximately €1.3 is generated in the broader economy.

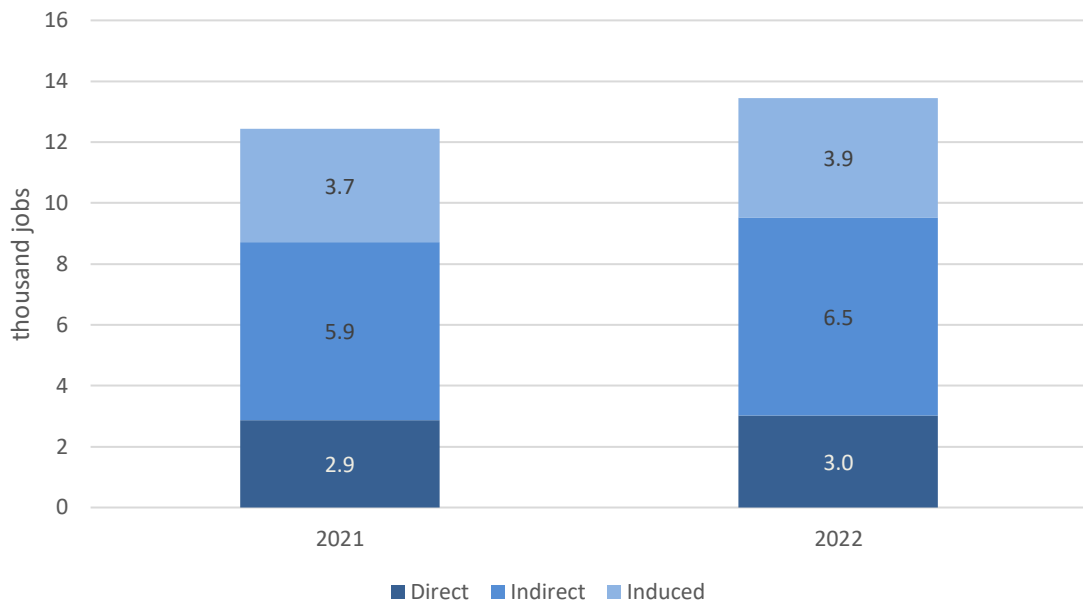
Figure 3.6: Contribution to GDP, total HEMEXPO activity, 2021-2022



Source: HEMEXPO, IOBE estimations

In terms of employment, it is estimated that the total activity of HEMEXPO supports 13.4 thousand full-time jobs in 2022, reflecting an 8.1% increase compared to 2021 (Figure 3.8). This growth is attributed to both direct and indirect effects. Notably, each job within HEMEXPO businesses supports a total of 4.4 jobs across the Greek economy..

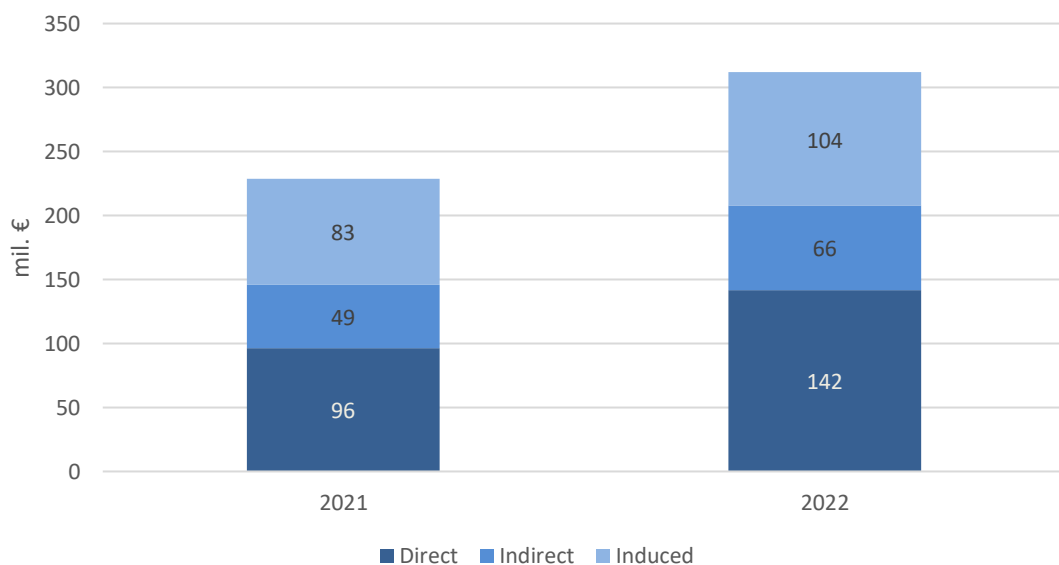
Figure 3.7: Contribution to employment, total HEMEXPO activity, 2021-2022



Source: HEMEXPO, IOBE estimations

Finally, the overall impact on tax revenues has shown an upward trend over the past two years, reaching €312 million in 2022, an increase of 36.2% compared to 2021. This growth is attributed to all three channels of impact, each significantly contributing to the increase, highlighting the strong interconnections and dependencies of the Greek economy on the activities of HEMEXPO businesses (Figure 3.8).

Figure 3.8: Contribution to public revenue, total HEMEXPO activity, HEMEXPO, 2021-2022



Source: HEMEXPO, IOBE estimations

3.4 Conclusions

The positive trends in the key figures and indicators of HEMEXPO's businesses, as outlined in the previous section, have also significantly influenced their economic footprint, which saw a substantial increase in 2022 compared to the previous year. This growth is evident both in the impact of sales to the water transport sector and in the overall activity of HEMEXPO companies.

In particular, the contribution of HEMEXPO businesses from sales to the water transport sector to the country's key economic variables was notably enhanced, generating €301 million in additional GDP in 2021 and €389 million in 2022. In terms of employment, jobs created along the supply chain due to HEMEXPO businesses reached 3.2 thousand in 2022, up from 2.9 thousand in 2021, marking an increase of 11.5%. Similarly, the contribution to tax revenues rose to €63 million in 2022, almost 1.5 times higher than the €46 million recorded in 2021.

The overall activity of HEMEXPO businesses also makes a particularly strong contribution to the Greek economy. Specifically, their contribution to GDP in 2022 was €2.0 billion, up from €1.4 billion in 2021 (+38.1%), indicating that for every €1 of production value in the sector, approximately €1.3 is generated in the broader economy. Additionally, the total employment impact of HEMEXPO businesses is estimated at 13.4 thousand full-time jobs in 2022, with each job in HEMEXPO supporting 4.4 jobs across the Greek economy. Finally, fiscal revenues grew from €229 million in 2021 to €312 million in 2022, a 36.2% increase, further bolstering government revenues.

Table 3.1: HEMEXPO's contribution to the Greek economy, from sales to maritime transport and from its total economic activity

Sectors and contributions	Direct	Indirect	Induced	Total	Multiplier
Sales to water transport					
2021					
GDP (mil. €)	230,0	34,1	37,3	301,5	1,3
Employment (thousand jobs)	0,9	1,3	0,7	2,9	3,1
Public revenue (mil. €)	21,0	8,8	16,0	45,9	2,2
Total economic activity					
GDP (mil. €)	1.029,1	194,6	194,0	1.417,7	1,4
Employment (thousand jobs)	2,9	5,9	3,7	12,4	4,3
Public revenue (mil. €)	96,5	49,2	83,2	228,9	2,4
Sales to water transport					
2022					
GDP (mil. €)	294,7	47,4	47,1	389,3	1,3
Employment (thousand jobs)	1,0	1,4	0,8	3,2	3,3
Public revenue (mil. €)	28,5	12,9	21,7	63,1	2,2
Total economic activity					
GDP (mil. €)	1.490,6	240,8	226,6	1.958,0	1,3
Employment (thousand jobs)	3,0	6,5	3,9	13,4	4,4
Public revenue (mil. €)	141,6	66,0	104,2	311,8	2,2

Source: HEMEXPO, IOBE estimations

4. CHALLENGES AND POLICY SUGGESTIONS

4.1 Introduction

The modernization of the productive structures of the Greek economy, combined with the strengthening of high value-added and export-oriented sectors, is essential for shaping a new production model that promotes sustainable growth and enhances the country's international competitiveness. In this context, the development of dynamic production ecosystems, such as those formed by HEMEXPO companies, serves as the foundation for a new developmental trajectory. With their strong export orientation and innovative capabilities, these companies exemplify the model the Greek economy needs to achieve sustainable growth and create highly skilled jobs. This transformation will enable Greece to compete effectively in international markets while laying the groundwork for an economy capable of addressing today's challenges.

Since 2014, HEMEXPO businesses have experienced rapid growth, as demonstrated by the financial data analyzed in Chapter 2. However, reaching this level of development has required marine equipment manufacturing companies to overcome significant challenges and address economic issues both within Greece and on the international stage.

This chapter provides an overview of the challenges faced by HEMEXPO businesses and presents targeted policy recommendations. These aim to establish a stable framework that supports the sustainable development of their production activities, ensuring that these businesses can adapt effectively to the continuously evolving economic landscape, both nationally and globally.

4.2 The challenges for the manufacturing of marine equipment

Protectionism in Asia

One of the most significant challenges for Greek marine equipment manufacturers is the competitive policies of Asian countries, which, as of October 2024, executed over 90% of new ship orders. China has been systematically enhancing the competitiveness of its shipbuilding industry and associated supply chain through extensive government subsidies. Additionally, Chinese state-owned banks have developed favorable financial products for shipbuilding, including export credits. Between 2006 and 2013, the Chinese government provided approximately \$90 billion in subsidies to the shipbuilding sector, including tax rebates that reduce production costs and boost the international competitiveness of Chinese shipbuilding products.³

³ Report on China's ship-building industry and policies affecting it, OECD 2021

Market estimates indicate that these protectionist policies reduce costs for Asian shipyards (in China and South Korea) by up to 40% compared to their European counterparts.⁴ This advantage is further reinforced by the 2019 merger of China's major state-owned shipbuilding groups, the China State Shipbuilding Corporation and the China Shipbuilding Industry Company, creating a consolidated protective framework. This support restricts the penetration of non-Chinese marine equipment manufacturers into the production chain and creates significant barriers for foreign companies trying to enter the Chinese market.

Despite these challenges, Greek marine equipment manufacturers maintain a limited presence in Asia, primarily thanks to the support of Greek shipowners and their established collaborations with specific Asian shipyards.

Lack of an effective European strategy to strengthen the shipbuilding and repair ecosystem.

There are approximately 300 active European shipyards, with only 40 operating in the global market.⁵ In 2023, European shipyards accounted for just 7% of global ship orders.⁶ The Draghi report emphasizes the importance of developing the shipbuilding industry to reduce European shipping's dependence on Asia and foster synergies with other strategically important sectors, such as defense (e.g., warship construction).⁷

Key EU measures to support shipbuilding include designing policies to accelerate the development of new technologies under frameworks like FuelEU and the Net-Zero Industry Act, and advocating for fair competition through the World Trade Organisation (WTO). However, European policy in this area remains heavily reliant on outdated institutional initiatives that require renewal. For example, the LeaderSHIP 2020 initiative, introduced in 2013, focuses on enhancing the competitiveness and sustainability of the EU shipbuilding and maritime sector through improved skills, environmental sustainability, financing, and regulatory frameworks.

Despite progress in recognizing the importance of the Blue Economy at the institutional level, there remains a lack of a cohesive strategy and the implementation of concrete measures to improve the competitiveness of European shipbuilding. This shortfall directly impacts the international competitiveness of European and Greek shipbuilding companies, hindering their ability to compete effectively in global markets.

⁴ The future of European competitiveness: In Depth Analysis and Recommendations, European Central Bank, 2024

⁵ The Blue Economy Report, European Commission 2024

⁶ SEA Europe – 2023 Shipbuilding Market Analysis

⁷ The future of European competitiveness, European Central Bank, September 2024

High Borrowing Costs and Financing

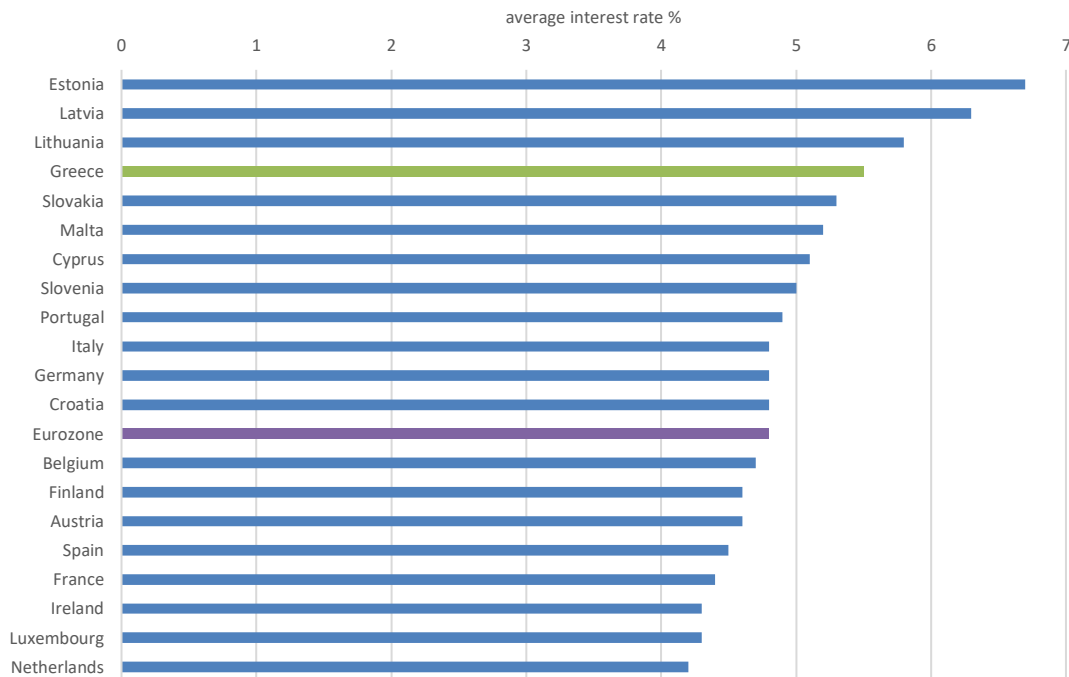
Despite positive developments in the availability of European and national funding, limited access to capital remains a significant obstacle for the competitiveness of HEMEXPO businesses and the broader shipbuilding ecosystem in terms of value-added activities.

At the European level, direct funding is available through programs such as Horizon Europe, which in 2024 issued a series of calls focusing on new technologies to reduce the carbon footprint of water transport and improve maritime safety through digital innovation. Additionally, the LIFE and Interreg programmes provide funding for projects aimed at demonstrating innovative technologies in shipping and promoting sustainability within the broader blue economy.

At the national level, efforts have been made in recent years to support shipbuilding more broadly, such as the rehabilitation of Greek shipyards. The Greek Transition and Resilience Plan allocates resources for a study to support the green transition planning of the Greek shipping fleet. Moreover, the Export Credit Insurance Agency (ECA) provides insurance and reinsurance for credits arising from shipbuilding and ship repair in Greek shipyards, enabling these facilities—and marine equipment manufacturers by extension—to undertake large projects for the repair of foreign-owned ships. Additionally, shipbuilding equipment manufacturers are eligible for funding under structural programs related to manufacturing and entrepreneurship, such as the NSRF (ESPA). However, the establishment of a dedicated national fund to facilitate the absorption of relevant funding for the broader shipbuilding and repair sector is notably lacking.

Access to capital is also constrained by the high cost of borrowing in Greece, which impacts not only research and development (R&D) investments in new technologies through European and national instruments but also broader productive investments. As of September 2024, Greece ranked fourth in the Eurozone in terms of borrowing costs for businesses, with an average interest rate of 5.5% compared to the Eurozone average of 4.8% (latest available data). This elevated cost of borrowing significantly limits the ability of HEMEXPO businesses to secure financing for critical investments, such as acquiring advanced equipment and expanding production lines, thereby hindering their growth potential.

Figure 4.1 Cost of borrowing for corporations, September 2024



Source: European Central Bank, September 2024

Depreciation and impact on investments

The depreciation rate for industrial investments in Greece currently follows a linear method with an annual rate of 10%, regardless of the actual useful life of the equipment. This fixed approach extends the depreciation period, limiting capital recovery and negatively impacting company liquidity. As a result, it constrains investment in the broader manufacturing sector and, by extension, in HEMEXPO businesses.

According to a study by IOBE,⁸ the adoption of accelerated depreciation with annual rates of 10%-10%-40%-40% could reduce the tax burden on manufacturing companies. Provided that at least 50% of the resulting tax relief is directed toward new productive investments, it is estimated that accelerated depreciation in Greek manufacturing could attract an additional €100 million in investments annually, leading to a total of €1 billion in new productive investments over a decade.

This policy change would also positively impact companies in the marine equipment manufacturing sector, fostering increased employment, technological advancement, and enhancing Greece's competitiveness in the international shipbuilding industry.

⁸ Interventions for the Sustainable Development of Greek Industry – Proposal Specification and Impact Assessment, November 2024, in Greek

Testing and certification infrastructure for marine equipment

The certification of the produced marine equipment is a prerequisite for their installation on new or existing ships and the issuance of the appropriate certificates by the classification societies. In Greece, despite the existing structure of the certification system, the main challenge concerns the adequacy of the certification infrastructure. This lack not only affects the certification process, but also limits the possibility of testing prototype technologies on a larger scale. As a result, the acceptance of products by classification societies remains uncertain, while the ability of companies to develop innovative equipment with high reproducibility and compatibility with international standards is also limited.

Licensing and spatial planning of industrial units

The licensing system in Greece is a significant factor delaying and restricting the development and expansion of marine equipment manufacturing businesses. Bureaucratic procedures and lack of coordination among the involved stakeholders lead to substantial delays in obtaining permits for the installation or upgrading of production units, as well as for the commercial exploitation of new technologies. Companies looking to invest in new facilities or production lines often face delays that can exceed two years. Similarly, the expansion of organized industrial parks, such as the potential expansion of the Schisto Industrial Park, where part of HEMEXPO's businesses are located, is hindered by these same challenges.

As the global shipping industry evolves rapidly to meet the strict regulatory framework for decarbonization and digitalization, it is critical for Greek companies to be able to respond promptly to technological and environmental requirements without delay.

Jobs and technical skills

Human resource management is a significant challenge for marine equipment manufacturers, as the shortage of skilled workers undermines the industry's competitiveness. A previous study by IOBE highlighted one of the primary difficulties as the mismatch between labor supply and demand, resulting in job vacancies, particularly in technical specializations.⁹ The demand for skilled technicians and machine operators is substantial and continues to grow, while significant knowledge and skills gaps persist among the current workforce.

Additionally, collaboration with educational institutions—which could play a crucial role in providing qualified graduates and improving the skills of existing staff—remains extremely limited, further exacerbating the issue.

⁹ Marine Equipment Manufacturing – Trends, Prospects, and Contribution to the Greek Economy, 2022. Available at: https://www.iobe.gr/research_dtl.asp?RID=257

4.3 Suggestions for strengthening the Greek ecosystem of marine equipment manufacturers

Addressing the above challenges was a key prerequisite for achieving the growth trajectory of HEMEXPO businesses during the 2014-2022 period. Looking ahead, the increasing global demand for water transport and the tightening of international climate policies are expected to positively influence the demand for marine equipment. This trend will drive the construction of new ships, as well as the maintenance and upgrading of existing ones to meet the increasingly stringent regulatory requirements for safety, decarbonization, and digitalization in shipping.

To maintain and expand their presence in international markets, HEMEXPO companies must identify effective ways to transform challenges into growth opportunities, enabling them to adapt to industry developments without delay. By carefully planning their next steps, fostering innovation, and pursuing targeted investments, Greek businesses can ensure they remain competitive, agile, and capable of meeting the rising demands of the global shipping market.

The next section outlines specific policy proposals aimed at supporting this goal, taking into account the challenges faced by the marine equipment industry. These proposals are presented on two levels: the first focuses on European policies essential for strengthening the broader shipbuilding and repair sector, which would have positive effects on Greek marine equipment manufacturers; the second emphasizes national measures to enhance their competitiveness and long-term viability.

A European strategy for shipbuilding and repair

The Draghi report¹⁰ recognizes that reliance on Asia for building merchant ships is causing significant losses to the European economy. These losses are further magnified when accounting for the decline in competitiveness of European shipbuilding equipment manufacturers and other industries involved in shipbuilding both in Europe and Asia.

In this context, and given the rapid emergence of new shipbuilding powers outside China and South Korea, such as India, it is imperative to develop a new European strategy for shipbuilding and repair. This strategy should complement other key policies and initiatives, including the European Green Deal, the Net Zero Industry Act, and the European Taxonomy, with two primary objectives:

Firstly, to strengthen the shipbuilding and repair sector within the EU, with a particular focus on high value-added projects. Secondly, to create a supportive framework that enhances the international competitiveness of the broader European ecosystem, including the marine equipment industry. Such a framework would facilitate access for European products and

¹⁰ The future of European competitiveness, European Central Bank, September 2024

services to Asian shipbuilding markets, where the majority of new shipbuilding and maintenance takes place, thereby providing a significant boost to European industry.

A critical element of this strategy is its financing. Expanding the scope of existing European funding mechanisms to support innovation in the maritime sector is essential. Encouraging innovation and its integration into Asian shipyards will not only increase turnover but also create highly skilled jobs within the EU, adding value and strengthening the global position of the European maritime industry.

European fund for shipbuilding and repair

In the context of the new European strategy, it is essential to explore various mechanisms at the European level that can reduce production costs within the EU, thereby enhancing the competitiveness of European products. One proposal is the establishment of a European Shipbuilding and Repair Fund, designed to provide incentives for shipbuilding within the EU while supporting the development of marine equipment and related products for entry into Asian shipyards. The resources for such a fund could be sourced from the revenues of the European Emissions Trading Scheme for global shipping operating within the EU, in collaboration with the Innovation Fund or other similar European financing instruments.

The proposed Fund should offer various forms of financial support, including grants, low-interest loans, and guarantees, to address the diverse needs of small, medium, and large European companies. By doing so, the Fund would be capable of reaching a broad spectrum of the maritime industry, supporting both large shipbuilding units and small and medium-sized marine equipment manufacturers.

Additionally, the Fund could promote projects that encourage cross-border cooperation among companies from different European Member States, thereby strengthening the EU's internal cohesion and fostering a robust network of partnerships. Such collaboration would facilitate the transfer of know-how and the development of innovative solutions, achieving economies of scale and enhancing Europe's overall competitiveness.

A monitoring and evaluation mechanism should be incorporated into the Fund to assess the progress and impact of the projects it supports. This mechanism would provide valuable feedback for further refining the Fund and related processes, ensuring that resources are allocated effectively to achieve the objectives of the new strategy. At the same time, it would ensure that resources are directed toward high-impact projects, enhancing the Fund's transparency and operational efficiency.

Strengthening diplomatic pressure to reduce barriers in Asian markets

To address the protectionist policies of Asian countries, the new strategy should include actions to strengthen diplomatic pressure for fair trade practices through the World Trade Organization (WTO) and foster strategic alliances with key players in the international

maritime industry. Such an approach not only positively impacts the European economy but also benefits Greek marine equipment manufacturers by creating conditions that reduce barriers to entry in Asian shipyards.

Enhancing investments by the Greek marine equipment manufacturing firms

Despite limited investment resources, HEMEXPO businesses have achieved remarkable results, demonstrating effective management and efficient utilization of available resources. However, relying on high returns from limited investment is not a sustainable long-term strategy, particularly in the face of intense international competition. Continuous investment in innovation, technology, and human capital is essential to strengthen the international competitiveness of Greek enterprises.

In this context, and to significantly boost productive investment, several proposals are presented below to improve access to alternative sources of financing and to provide incentives through tax instruments. These measures aim to ensure that Greek marine equipment manufacturers have the resources needed to sustain growth, adapt to market demands, and compete effectively in the global arena.

Access to alternative sources of financing

As mentioned earlier, Greek firms face the fourth-highest borrowing costs in the Eurozone. Green bonds and other sustainable financing mechanisms (e.g., loans or bonds with sustainability-linked clauses) offer a potential solution for HEMEXPO businesses to lower capital costs. By accessing funding on more favorable terms for projects that reduce the carbon footprint of water transport, these mechanisms can help companies finance innovative technologies and green transition initiatives while improving their competitiveness in international markets.

The growing interest from investors in sustainable investments creates favorable conditions for lower interest rates, enabling companies to secure funding for green and innovative projects at reduced financial costs. To take advantage of these opportunities, the preparation and publication of ESG (Environmental, Social, and Governance) reports is essential. ESG reports, while initially requiring time and resources, enhance a company's investment profile, building transparency and credibility with investors, and serving as a prerequisite for accessing sustainable financing mechanisms.

Simultaneously, to increase the participation of Greek enterprises in European direct funding programs such as Horizon Europe, LIFE, and Interreg, it is crucial to provide support through specialized bodies (e.g., national contact points for these programs). These bodies can offer technical assistance for preparing competitive proposals. Such programs, which fund innovation development and demonstration projects, represent a vital tool for reducing

investment risk while promoting sustainability and innovation within the marine equipment manufacturing sector.

Tax Incentives to strengthen investments and exports

The tax framework can play a catalytic role in improving the export potential of HEMEXPO businesses. In this context, it is proposed to implement measures with a neutral or even positive fiscal impact, which will nevertheless offer substantial benefits to businesses. One example is the increase in depreciation rates for equipment and infrastructure related to maritime technology. This will reduce companies' tax liabilities, creating the necessary space for reinvestment in innovative solutions and production facilities.

An additional tax measure that could be tested and adopted, if proven to increase activity and tax revenues in the long term, is the provision of tax incentives for exports. Indicatively, reducing the tax rate on export revenues or granting additional tax deductions for costs related to export activities - such as compliance with international standards - could reduce costs for Greek firms. Such incentives would enhance their competitiveness in international markets, act as a lever for the overall development of their export activity, while under certain conditions and through the multiplier effects of HEMEXPO businesses, they also enhance the dynamics of the Greek economy as a whole.

Development of national testing and certification centers

The establishment of specialized certification and testing centers will provide Greek companies with the necessary reliability and flexibility to develop new products, ensuring they meet the required standards for installation on ships, whether for new builds or repairs and upgrades. Additionally, collaboration with internationally recognized certification centers will allow Greek companies to access global certification processes and methods recognized by associated bodies (such as international classification societies and regulatory authorities).

Furthermore, operating these centers at the national level would reduce the need for maritime equipment companies to seek certification services abroad, thereby lowering costs and shortening the time required for completing procedures. The certification centers would also foster further innovation within the country, offering broader benefits for manufacturing and the economy.

In this context, it is important to consider a framework of tax incentives or subsidies to encourage investment in technological certification and testing infrastructures.

Faster permitting procedures

The development of a modern and effective regulatory framework that supports the rapid implementation of investments is essential, not only for enhancing the competitiveness of HEMEXPO's businesses but also for ensuring their medium-term viability. Simplifying and digitalizing environmental and other permitting procedures will significantly reduce approval

times, providing greater flexibility for both businesses and investors. Additionally, the establishment of specialized fast-track licensing services for strategic investments within the maritime ecosystem is considered necessary, as it will facilitate the implementation of high-priority projects and enhance the sector's overall productive capacity.

Through these improvements, the regulatory framework could become a key driver of growth, attracting new investments and strengthening the international competitiveness of Greek shipping companies.

Human resources: reducing the gap between labor supply and demand. Focus on continuous training

Enhancing skills and employment is a strategic priority for the sustainability of the marine equipment ecosystem. To address the gap between labor supply and demand, cooperation with educational institutions at all levels—secondary, post-secondary, and tertiary—is essential. The creation of specialized curricula, tailored to the needs of the marine equipment industry, will help prepare graduates with the necessary knowledge and skills. Collaborating with educational institutions to develop courses and internships will provide students with practical experience and better equip them to meet industry demands, thereby increasing their employability.

Additionally, investing in the ongoing training of the existing workforce is critical for the competitiveness and adaptability of HEMEXPO businesses. While businesses have already participated in targeted training programs in advanced technologies for unskilled workers, machine operators, and technicians, it is essential to continue and expand these efforts. Such training programs will not only equip the workforce with modern skills but also improve the efficiency of production processes and the quality of products and services provided