

SUMMARY

ECONOMIC ANALYSIS OF THE NORWEGIAN MARITIME INDUSTRY 2023

Key Figures and Market Outlook



MENON-PUBLICATION NR. 126/2023

Av Maren Nygård Basso, Serli Abrahamoglu, Kaja Haug, Sophie Emilie Sundt og Erik W Jakobsen



Preface

This report is conducted on behalf of Norsk Industri. It presents key economic numbers and performance indicators for the manufacturing part of the maritime industry, i.e.. shipyards, ship equipment producers and maritime technological services.

Menon Economics analyses economic issues and provides advice to businesses, organisations, and public authorities. We are a consulting firm operating at the interface between economics, politics, and markets. Menon combines social and business economics expertise in fields such as social profitability, economic impact, business and competition economics, strategy, finance, and organisational design. We use research-based methods in our analyses and work closely with leading academic environments in most fields.

This is the English summary from the published report. The entire report is available in Norwegian on our website www.menon.no.

October 2023

Maren N. Basso
Project leader
Menon Economics

Summary

Positive development in revenue, value added and employment




The maritime industry experienced growth in both revenue and value added from 2021 to 2022. Industry forecasts suggest this growth will persist through 2023 and 2024. Despite a slight decline in employment in 2022, projections indicate an increase in 2023. By 2024, the industry’s revenue is expected to be NOK 25 billion higher than in the last peak year of 2019. This positive outlook is largely attributed to favourable market trends in the offshore segment, especially within offshore wind and oil and gas sectors, supplemented by a boost in global shipbuilding activity. The revenue trajectory for the three primary groups within the maritime industry charted a relatively stable and parallel course from 2012 to 2020. This pattern, however, was disrupted by the aftermath of the coronavirus pandemic. Whereas equipment suppliers and service providers saw an uptick in activity levels as early as 2021, shipyards experienced a downturn in revenue growth post-2020. Shipyards anticipate a similar trend continuing into 2023 and 2024. However, their outlook is arguably more pessimistic than necessary, so it won't be surprising if the trend proves more favourable when the final figures are reported in 1 to 2 years.

Expectation of increased profitability in 2023

Aligned with projections of continued growth in industry activities, more than half of the survey respondents expect an increase in profitability for the year 2023 compared to 2022. Meanwhile, approximately one-third of the surveyed companies predict a decline in their profitability. These expectations are influenced by several factors. The primary driver for the anticipated increase in profitability is market development, particularly linked to higher activity levels in markets of offshore wind, offshore oil and gas, and the transportation of goods and cargo. Cost efficiency ranks as the second most important factor. The expectation of reduced profitability must be considered within the context of specific market developments in which various actors operate, as well as the broader global economic situation. In particular, the prices of input factors and services are likely to negatively impact profitability, while fluctuations in currency exchange rates are perceived to have both positive and negative effects, depending on the companies' exposure to foreign markets.

Economic development in the three maritime groups

Equipment suppliers constitute the largest group within the industry, measured in terms of revenue, value added, and employment. Service providers rank second, followed by shipyards.

2023 (estimated numbers)	Equipment suppliers	Shipyards	Service providers
 Revenue (NOK Bn.)	86	26	63
 Value added (NOK Bn.)	28	6	23
 Employment	20 200	8 000	16 900

Equipment suppliers – the strong growth continues. Equipment suppliers have quite diversified portfolios and serve a broad range of market segments. Their close connections with the rest of the maritime industry, both domestically and internationally, position them as the largest group in terms of revenue, value added, and

employment. Notably, shipowners, being the suppliers' primary revenue source, account for more than half of their total revenue, underscoring their critical role as the most important customer group. The collaborative relationship between Norwegian shipowners and equipment suppliers is particularly crucial when Norwegian vessels are constructed overseas, significantly boosting the suppliers' exports. Moreover, around 40 percent of their revenue comes from shipyards, including both Norwegian and international entities. The remainder of their revenue is secured through transactions with other equipment and service suppliers.

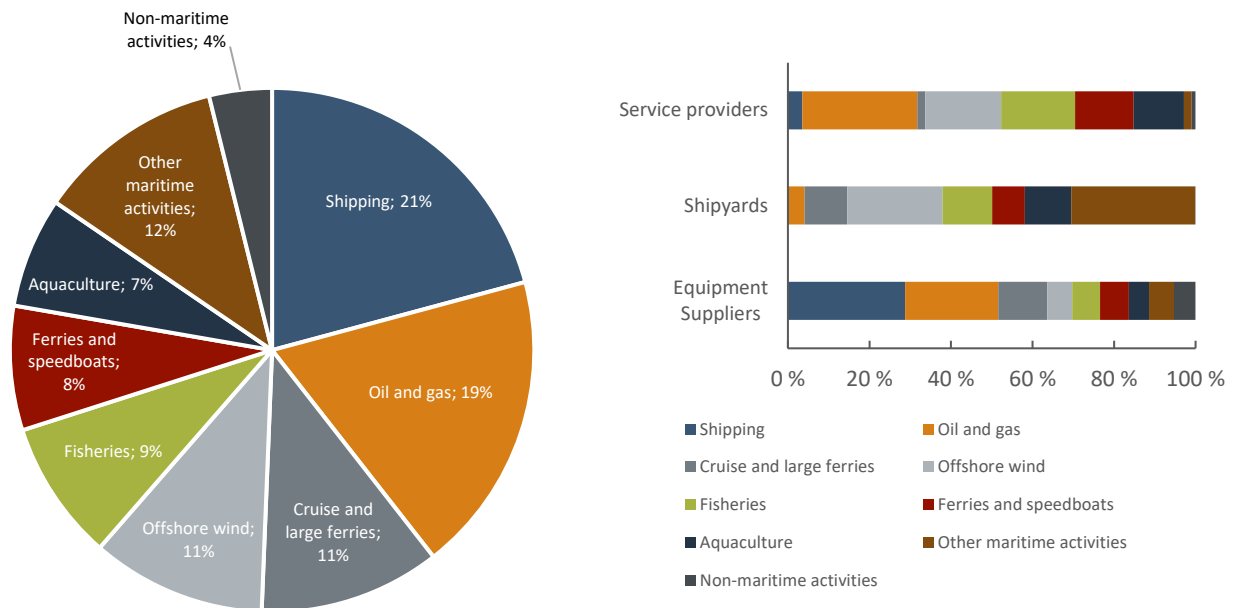
Shipyards – challenges persist despite positive market indicators. As of 2023, shipyards represent the smallest group within the Norwegian maritime industry in terms of revenue, value added, and employment. Recent years have seen weak development with the total revenue of yards dropping by 40 percent – adjusted to current Norwegian kroner – compared to the peak year of 2014. Despite these challenges, shipyards continue to play an important role in the industry. The innovation emerging from these yards, especially through cluster-based initiatives, has been crucial in driving restructuring, enhancing productivity, scaling operations, and increasing exports for years. Three-quarters of the yards' total revenues are generated from new-building activities, whereas a quarter of the revenues are associated with refitting, repair, and maintenance tasks. Nonetheless, the landscape among the yards varies considerably, with numerous smaller entities focusing solely on repair and maintenance. In contrast, the larger yards, along with several specialized medium-sized ones, mainly concentrate on new-building projects.

Service providers - consistent growth since 2020. The maritime industry relies on a wide array of service providers, including ship designers, technological service firms, and trading companies (i.e., importers and dealers of ship equipment). These providers, particularly those in technological services, are closely linked with the Norwegian shipbuilding industry. This connection is reflected in their economic development. Despite challenges among the yards, maritime service providers have demonstrated a faster recovery from setbacks such as the oil price drop and the coronavirus pandemic. Additionally, they are expected to experience sustained growth in 2023 and 2024, driven by rising demand for services and technologies that enhance the sustainability and efficiency of shipping.

Market segments

The maritime sector in Norway has undergone significant structural and substantive changes, fundamentally altering the industry from what it was 10 and 20 years ago. Despite these major structural transformations, the transportation of goods (both deep sea and short sea) remains the largest market segment for the industry in 2023 in terms of revenue, as illustrated in the figure below.

Figure A: Revenue split by market segments based on a survey of Norwegian Industry members. N=72. Source: Menon Economics



However, significant differences exist among the three main groups concerning the importance of the various markets. While offshore wind is particularly important for shipyards this year, a substantial portion of the revenue for equipment suppliers derives from shipping, as illustrated in the figure above.

Offshore oil and gas and offshore wind: Until the oil crisis in 2014, offshore oil and gas was the dominant market segment for the Norwegian maritime industry, accounting for about 70 percent of the industry's total revenues. Following the drop in oil prices in 2014, shipping companies ceased contracting new vessels, and in the subsequent years, the significance of oil and gas gradually declined. This trend continued until 2020. From 2020 to 2023, activity within the oil and gas sector—both globally and on the Norwegian continental shelf — increased,¹ driven by higher oil prices and a surge in gas prices, particularly influenced by the war in Ukraine and the subsequent European energy crisis. In recent years, the offshore wind market has also seen substantial growth. Together, these two offshore industries accounted for approximately 30 percent of the maritime industry's revenue in 2023. However, significant differences exist among the three main groups; notably, the shipyard industry has seen a particularly high proportion of its revenues and orders from the offshore wind sector.

Fisheries and aquaculture. Norwegian fishing and aquaculture companies are the primary customers for Norwegian shipyards, and historically, these shipyards have been the preferred choice for Norwegian shipowners. However, in recent years, Norwegian shipyards have faced increasing competition from foreign shipyards in this segment. Although a large proportion of vessels continue to be built in Norway, Turkish shipyards have notably captured a significant market share from Norwegian shipyards. In 2023, the fishing and aquaculture industry accounted for approximately 16 percent of the total revenue in the maritime industry. This

¹ *Norwegian Petroleum (2023). Recent activity. Available [here](#).*

market is particularly crucial for service providers, with nearly 30 percent of their 2023 revenue associated with fisheries and aquaculture.

Cruise and large ferries: Norwegian shipyards experienced significant growth in cruise construction activity and orders within the expedition cruise sub-segment from 2015, until the coronavirus pandemic brought a halt to cruise tourism. Equipment suppliers and service providers also impacted this market with contributions such as ship design and technological services like electrical and installation work. About 11 percent of the industry's revenue in 2023 was associated with the cruise and ferry market. Equipment suppliers are the group with the highest proportion of revenue associated with this market, equivalent to 12 percent.

Ferries and speedboats: Norwegian shipyards typically produce ferries and speedboats for domestic shipping companies. However, a noticeable trend towards heightened competition from foreign shipyards in this segment has surfaced, particularly post-2019. Simultaneously, there is a rising trend of contracting for environmentally friendly vessels within this market segment. Currently, ferries and speedboats are the most adaptable segments for decarbonisation through the implementation of battery-based propulsion systems. Nevertheless, this market segment constituted only eight percent of the industry's total revenue in 2023.

Shipping. The freight of goods in bulk and general cargo accounted for just over 20 percent of the maritime industry's revenue in 2023, making it the single largest market in terms of revenue. No cargo ships are constructed in Norway, resulting in minimal revenue from this market for Norwegian shipyards. However, it is a robust market for both equipment suppliers and service providers, with a particular emphasis on the former. These suppliers cater to a diversified portfolio of national and international customers. As the green transition progresses, substantial opportunities present themselves for Norwegian equipment suppliers and service providers. Their potential lies especially in gaining market share in green technology and services related to zero-emission propulsion systems and energy-efficient solutions.

An export-oriented industry

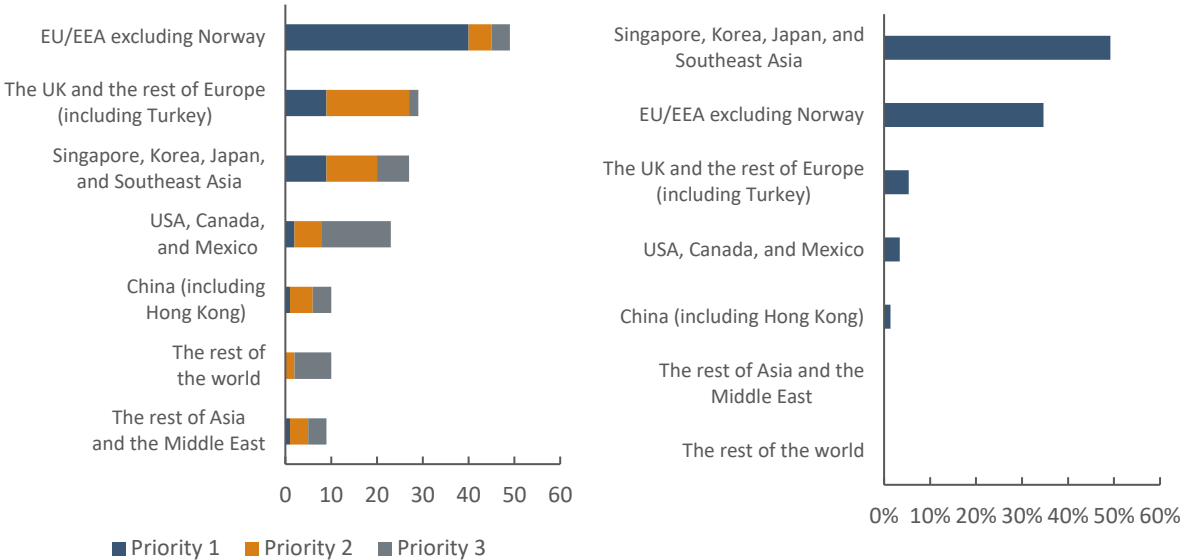
The Norwegian maritime industry is a leader in both sustainable technological solutions and innovative ship concepts. This is demonstrated by the fact that exports accounted for close to 60 percent of the industry's revenue in 2023, equating to just over NOK 100 billion. Equipment suppliers make up around NOK 64 billion of these exports, with an export share of nearly 75 percent. This significant share results primarily from their direct sales to foreign shipyards and shipping companies. Apart from direct exports, equipment suppliers also engage in indirect exporting by providing equipment to Norwegian shipyards that construct vessels for foreign shipping companies or by supplying gear to Norwegian shipping companies operating in international waters. Service providers accounted for NOK 30 billion of the exports with the remainder attributed to shipyards.

The EU/EEA represents the most significant export market for the Norwegian maritime industry, constituting around 37 percent of export revenue in 2023. Asia and the Middle East are also key markets, accounting for 32 percent of export revenues. The combined exports to the USA, Canada, and Mexico make up only 16 percent of the total, marking half of the exports compared to Asia and the Middle East. The remainder of Europe holds less significance to the industry, contributing a share of only 6 percent. Significant differences exist between the main groups within the maritime industry. For service providers, the European market is crucial. In contrast, the main markets for equipment suppliers lie within the EU/EEA, Asia, and the Middle East.

The road ahead: Export initiatives towards 2030

In 2022, a national export council was established to provide counsel and guidance linked to the government's objective of boosting Norwegian exports—excluding oil and gas—by 50 percent by 2030. With green maritime export being among the chosen initiatives by the government, the EU/EEA region stands out as the most significant in response to which geographical markets should be prioritised in the export drive. Six in ten maritime companies put the EU/EEA at the top of their list, while 40 percent view the UK and the rest of Europe (Turkey included) as their primary or secondary priority. Consequently, Europe is seen as the key geographical market moving forward. However, it is crucial to note that distinctions exist between large and smaller businesses. By weighting results according to company revenue, it is clear from the figure below that export efforts geared towards Singapore, Korea, Japan, and Southeast Asia can be deemed considerably advantageous, followed by the EU/EEA. Hence, proximate markets hold higher priority for smaller companies, while Asia does for larger ones. Worth noting is that China, USA, Canada, and Mexico aren't regarded as particularly beneficial to prioritise.

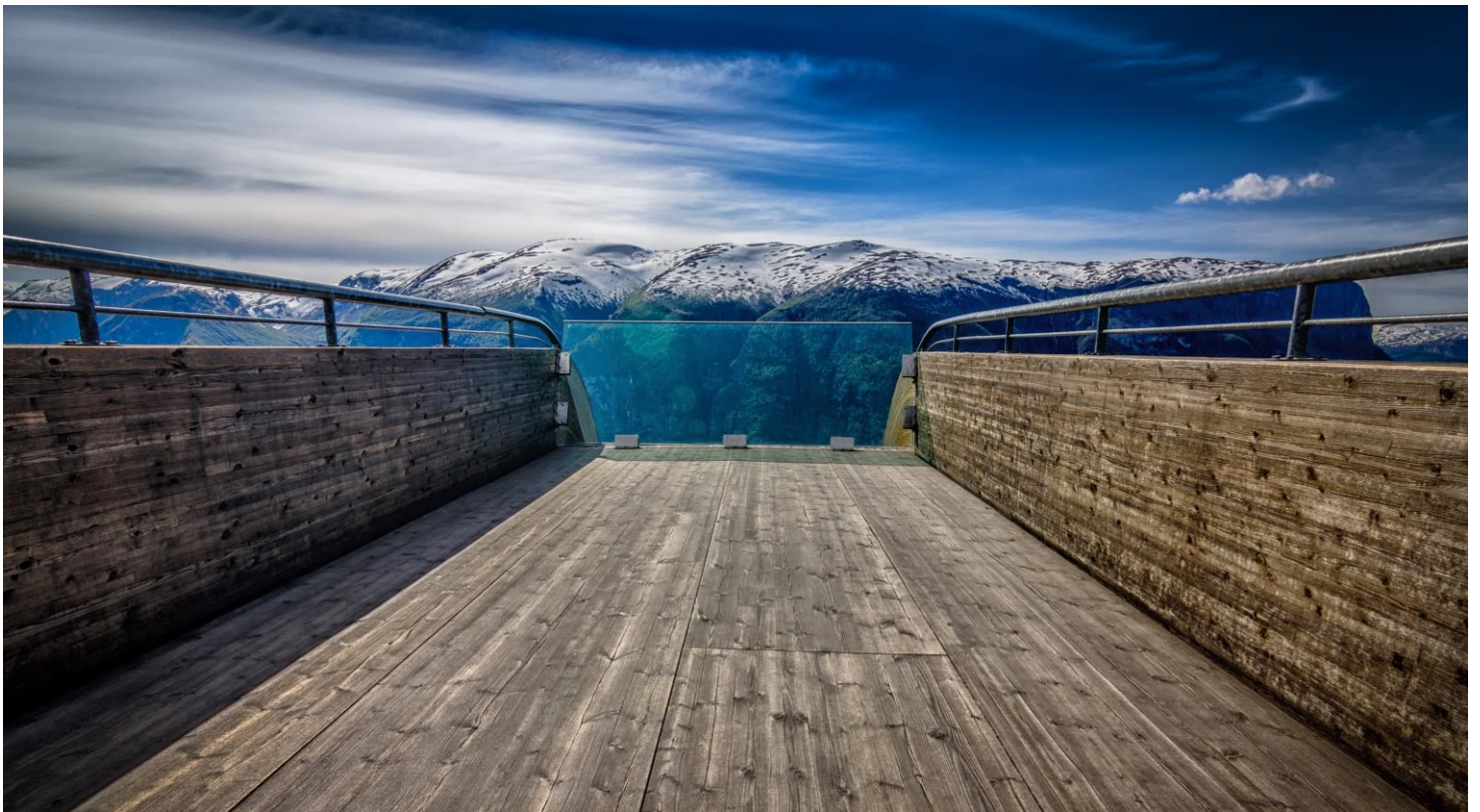
Figure B: Left: "Which geographic markets would be beneficial for your business to prioritise in the national export drive in the years leading up to 2030?" Right: First priority weighted according to the companies' revenue. N=65. Source: Menon Economics



Companies in the maritime industry were also asked which market segments would be beneficial to prioritise in export initiatives. The results reveal a preference for continued focus on the oil and gas market, yet an almost equal number of firms identify the offshore wind segment as the top priority. When the responses are weighted according to company size (by revenue), it becomes apparent that the offshore wind market segment is the preferred focus for a substantial proportion of these companies. Given the ongoing developments in, and increased focus on, the offshore wind market, we foresee a demand for the construction of new vessels to meet these ambitions. Evidently, a significant proportion of companies are identifying lucrative opportunities within this market segment.

There's substantial evidence indicating that the maritime industry is likely to uphold its status as a crucial export industry. Given the ongoing trajectory towards green transitions, coupled with consistent advancements in automation and shipping technology, opportunities are evident for every facet of the maritime industry. These

extend from shipbuilding and equipment supply to ship design and services. As awareness grows among private entities about climate challenges, alongside increasing international directives for emissions reduction in shipping, the global demand for low or zero-emission solutions is intensifying. Moreover, automation and cutting-edge technology are gaining momentum for their potential to boost efficiency and safety. This confluence of trends underscores maritime industry's capacity to remain a significant export sector, leveraging automated and sustainable solutions to meet the escalating demands for efficiency and environmental responsibility.



Menon Economics analyses economic issues and provides advice to businesses, organisations and public authorities. We are a consulting firm operating at the interface between economics, politics and markets.

Menon combines social and business economics expertise in fields such as social profitability, value creation, business and competition economics, strategy, finance and organisational design. We use research-based methods in our analyses and work closely with leading academic environments in most fields. All Menon public reports are available on our website www.menon.no