

Abstract and summary

The seafood industry is one of Norway's most important rural industries. The industry is present throughout Norway, but it is most important to Gross Value Added (GVA) and employment in the regions of Western and Northern Norway. Few industries have grown more than the seafood industry in the past 15 years, and in 2021 a record-breaking NOK 120 billions' worth of Norwegian seafood was exported.

Its purchases of goods and services make the seafood industry a basis for employment and GVA throughout Norway. According to our calculations, the seafood industry's total impact on Norwegian employment in 2021 was around 106,000 jobs. This is an increase of approximately 13,000 from 2020. The increase in the number of employees breaks down evenly between employees in the industry (direct impact) and employees in other businesses as a result of the seafood industry's purchases of goods and services and investments (indirect impact).

Our analyses show that the seafood industry generated net value added amounting to NOK 120 billion in 2021, including the economic impact. This is an increase of about NOK 10 billion from 2020.

GVA in the seafood industry is at an all-time high. The industry's GVA formed the basis for a total tax impact of around NOK 34 billion in 2021.

Development in the seafood industry

Few Norwegian industries have grown more than the seafood industry over the past fifteen years. According to Statistics Norway, the Gross Value Added (GVA) from the industry's primary activities grew by around 250 per cent between 2008 and 2021. There was an 8 per cent increase from 2020 to 2021. The number of people in employment has also grown a great deal since 2008, although the increase in employment is lower than the

Key terms

Gross value added (GVA): Gross value added is the value that a company creates after the purchase of goods and services has been deducted. It consists of employees' wages, profits to owners, and tax paid to the authorities. GVA is calculated as the operating result before depreciation (EBITDA) plus wage costs and can be considered the sum of return on capital and return on labour.

Net value added: Gross value added minus depreciation.

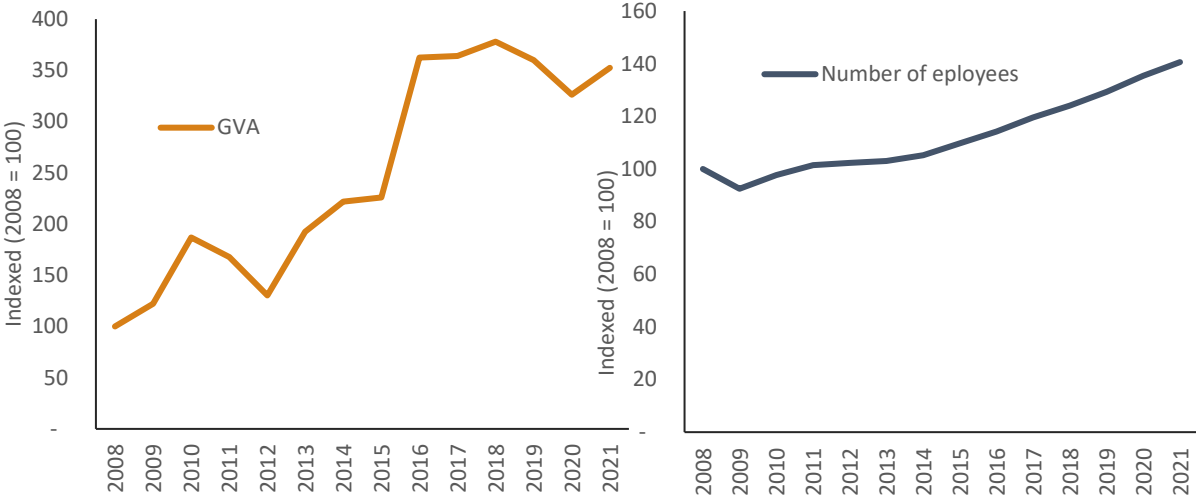
Employment: The number of persons in employment is the sum of employees and self-employed persons

Full-time equivalent: A full-time equivalent is the amount of work carried out by a full-time employee in the course of one year.

Economic impact: Economic impact is the measure of an industry's total economic impact. In addition to employment and GVA in the industry, economic impact also includes employment and GVA in the supplier industry. In this report, we refer to these as 'direct' and 'indirect' impacts, respectively, and the sum as 'employment impact' or 'gross value added impact'.

increase in GVA. Since 2008, the number of people employed in the industry's primary activities has grown by 41 per cent. In 2021, the number increased by four per cent.

Figure A. Development in GVA and the number of people employed in the primary activities in the seafood industry (fishing and aquaculture). 2008–2021. Source: Statistics Norway

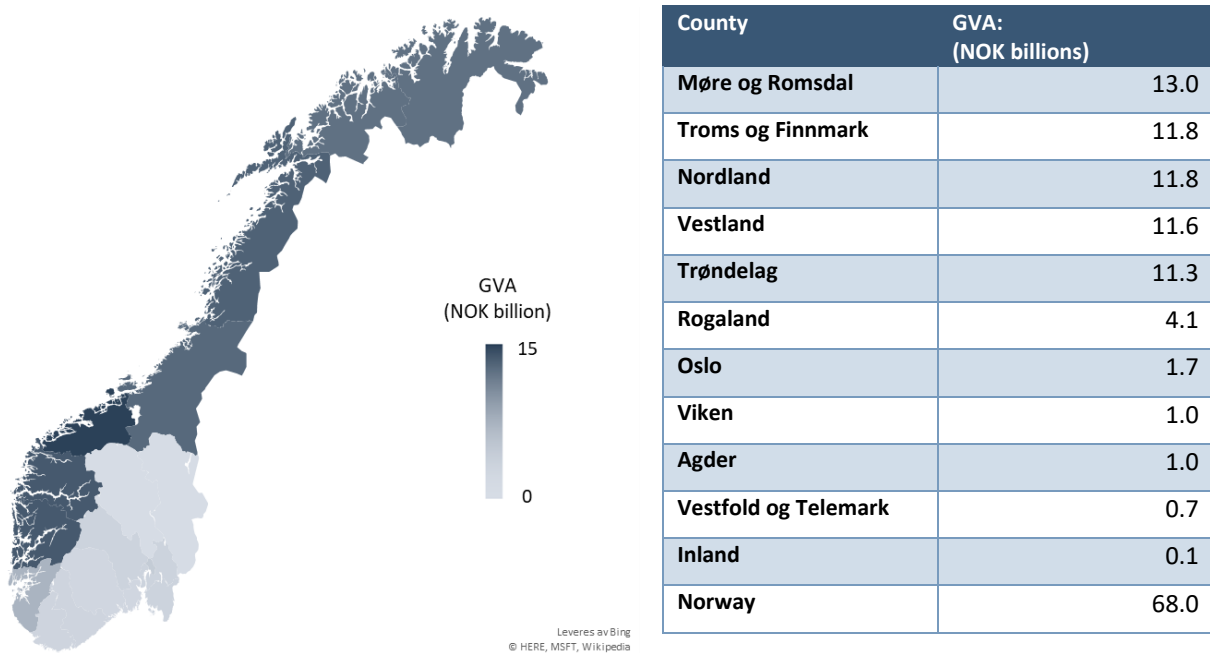


In 2021, the number of people employed in the entire seafood industry, including the fish processing industry, sales, and the supplier industry, was 53,300. GVA was NOK 68 billion.

Where in Norway is the seafood industry located?

For both geographical and historical reasons, the seafood industry is not evenly distributed across Norway. The activity is distributed in such a way that the five largest seafood counties have a significantly larger share of GVA than the remaining six counties. In 2021, GVA was highest in Møre og Romsdal, at NOK 13 billion. The counties of Troms og Finnmark, Nordland, Vestland and Trøndelag are very close in terms of GVA, all at between NOK 11 and NOK 12 billion. The companies in these five counties together contribute NOK 60 billion in GVA, or 88 per cent of the industry's total direct GVA. In other words, the seafood industry's GVA is clearly concentrated in these coastal counties. The geographical distribution between counties is shown in the illustration and table below.

Figure A-1: GVA broken down by county. 2021. Source: NORCE and Menon

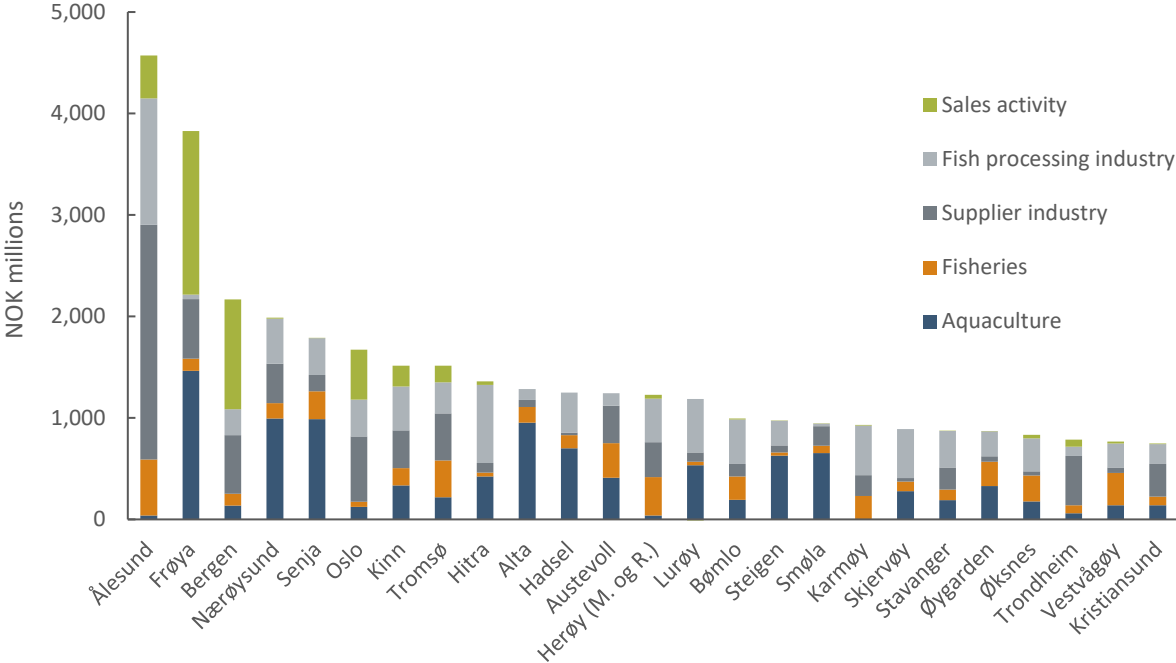


Which are the most important seafood municipalities in Norway?

It has long been debated which municipality is the most important seafood municipality. There are different ways of measuring this. Measured in total GVA – which is basically the sum of wages and profits in the companies and corresponds to the companies' contribution to Norway's gross domestic product (GDP) – Ålesund is on top, closely followed by Frøya. Bergen, Nærøysund and Senja take third, fourth and fifth place, respectively, as the most important seafood municipalities in 2021, measured according to GVA.

In Ålesund, it is the supplier industry, the fisheries, and the fish processing industry in particular that account for a large part of the GVA, and in 2021, Ålesund was the most important single municipality in all of these main groups. In 2021, Frøya was the largest single municipality within the main groups of aquaculture and sales. The reason that Bergen and Ålesund excel in terms of turnover and GVA is the fact that they are relatively large cities, with head office functions for many seafood companies and many businesses in the supplier industry. On the other hand, Frøya is a rural municipality whose business and industry are largely centred around the seafood industry, and where GVA is significantly boosted by the fact that Kverva's holding company, Kverva Industrier, receives much of the profits from the group. Among other things, Kverva Industrier is the majority owner of the third largest player in the Norwegian aquaculture industry: Salmar. The figure below shows the largest seafood municipalities measured according to GVA.

Figure A. GVA in the 20 municipalities with the highest GVA in the seafood industry in 2021, divided by the industry's main groups. The economic impact is not included. Source: Norce and Menon Economics



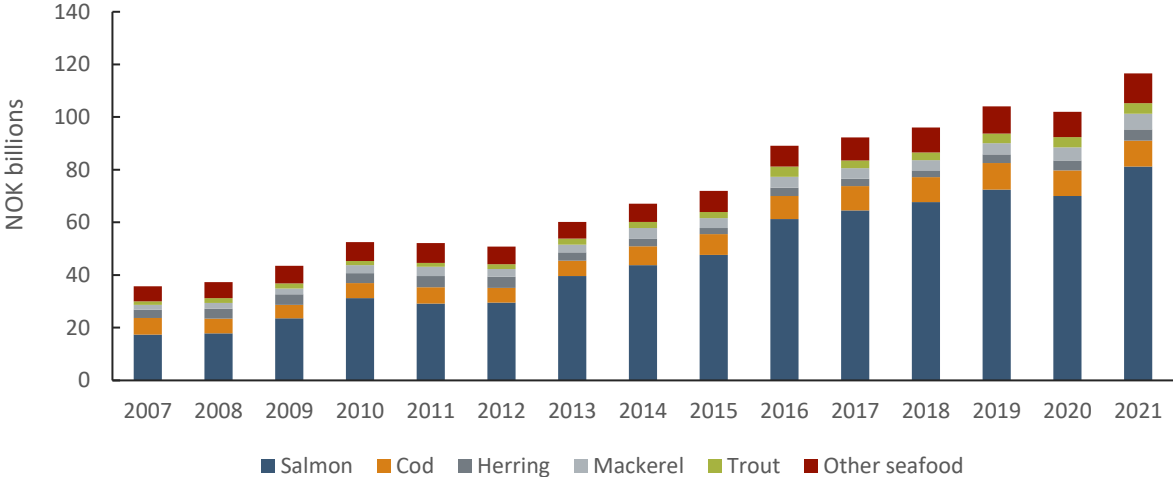
Trade and export

The marked increase in turnover and GVA in the seafood industry in recent years can largely be explained by a significant increase in exports. The value of seafood exports has increased from accounting for 14 per cent of mainland exports in 2012 to 21 per cent in 2021. The seafood industry has thus become one of mainland Norway's largest export industries.

According to trade statistics from Statistics Norway, 2.7 million tonnes of Norwegian seafood worth NOK 117 billion were exported in 2021¹. This set a new record for seafood exports, both in terms of export value and volume. The record export volume, coupled with high prices generated by a strong demand for seafood, contributed to this all-time high. This is shown in the figure below.

¹The category 'seafood' is defined in accordance with Statistics Norway's definition, which includes all fish products registered under chapter 03 and headings 16.04 and 16.05 in the Norwegian Customs Tariff. The figure is somewhat lower than corresponding statistics from the Norwegian Seafood Council, as the Council also includes certain seafood products registered under other headings in the Customs Tariff. In this report, we consistently use Statistics Norway's definition of seafood.

Figure A-2: The development in export value. 2007–2021. NOK billions. Source: Statistics Norway



The export value has recovered after a minor drop in year 2020, when closed markets due to corona restrictions led to reduced demand for seafood. Since 2007, the value of Norwegian seafood exports has tripled, driven by high demand for Norwegian seafood products worldwide.

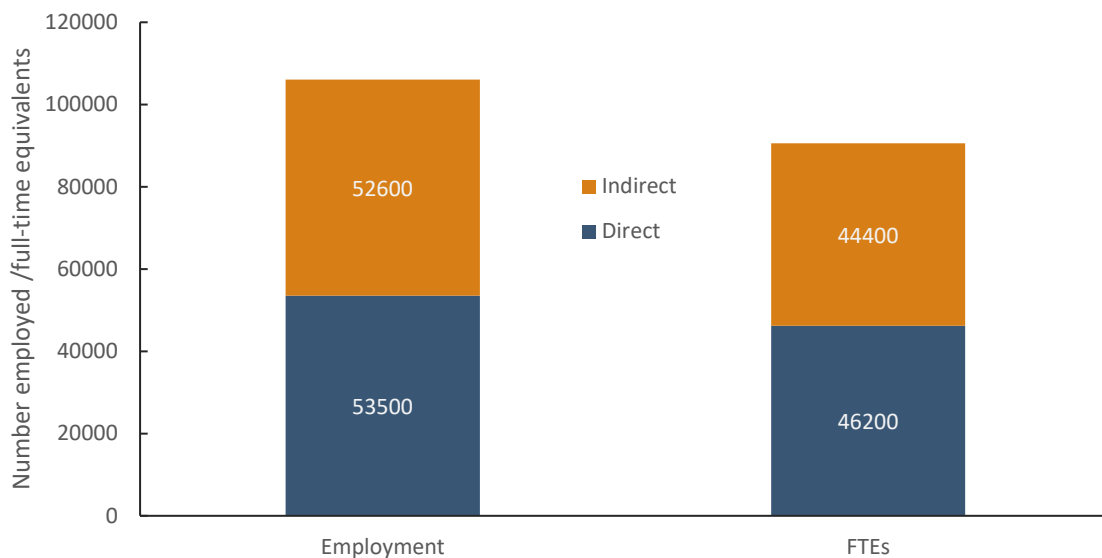
Europe is the main market for Norwegian seafood exports. In 2021, two-thirds of the seafood industry's export revenues came from Europe. At the same time, exports to overseas markets in Asia and the USA are rapidly growing, and it is in these markets that we find the greatest growth potential going forward.

Economic impact of the seafood industry

The seafood industry does not only create value in the form of employment, GVA and tax in its own companies. Its purchases of goods and services make the seafood industry a basis for GVA, employment and tax outside the value chain. These effects – the economic impact – have been calculated using Menon’s economic impact model (ITEM).

The calculations show that the seafood industry forms the basis for around 106,000 jobs in 2021. Measured in full-time equivalents, which is the total number of jobs converted into the equivalent number of full-time positions, we see a total employment impact of around 90,500. This represents a significant increase of 13,000 in employment compared with 2020. The results are shown in the figure below.

Figure A-3: Total employment impact (incl. economic impact) in the seafood industry in 2021. Source: Menon Economics



As the figures show, around 53,300 people work in the seafood industry, including the specialised supplier industry. The demand from seafood companies forms the basis for around 52,600 jobs in adjacent industries, as indirect employment². The increase from 2020 is evenly distributed between direct and indirect employment impact.

Based on NORCE's database of all seafood businesses, we have estimated how the employment impact breaks down between aquaculture and fisheries. We allocate both direct and indirect employment based on this estimate. The results are shown in the figures below.

² In this context, it should be emphasised that these are gross calculations. The Norwegian business and industry is highly adaptable, as became evident for example in the aftermath of the fall in oil prices in 2014, and companies that experience a drop in deliveries will naturally look to other value chains to maintain GVA and employment.

Figure A-4. Total employment impact from aquaculture in 2021. Broken down by main group. Source: Menon Economics, Norce

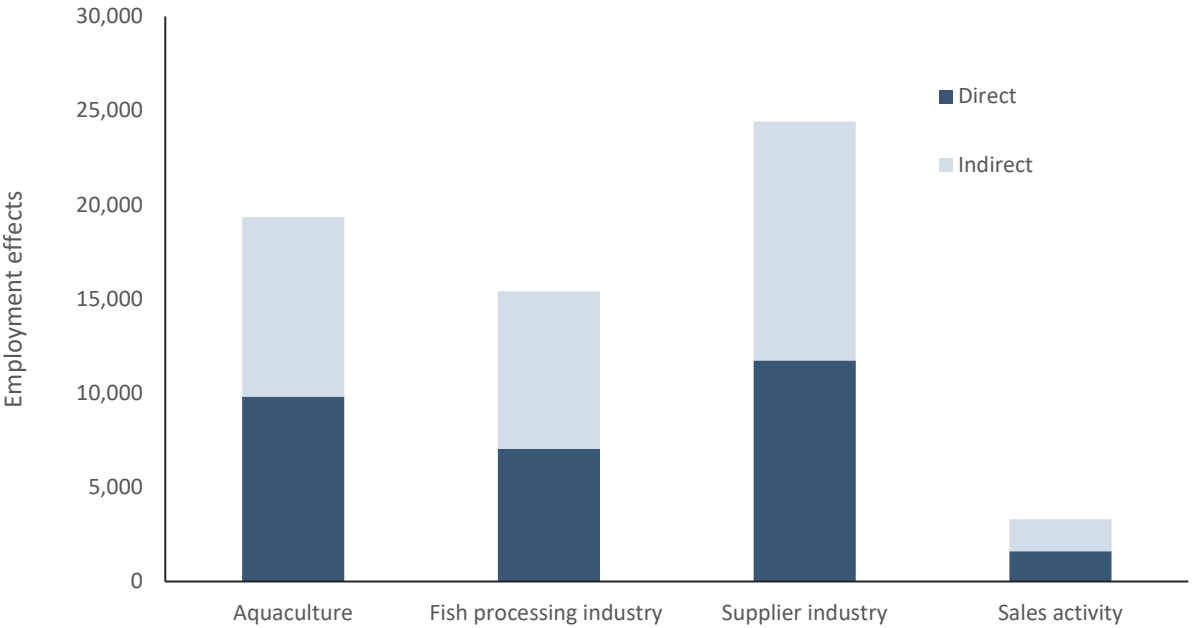
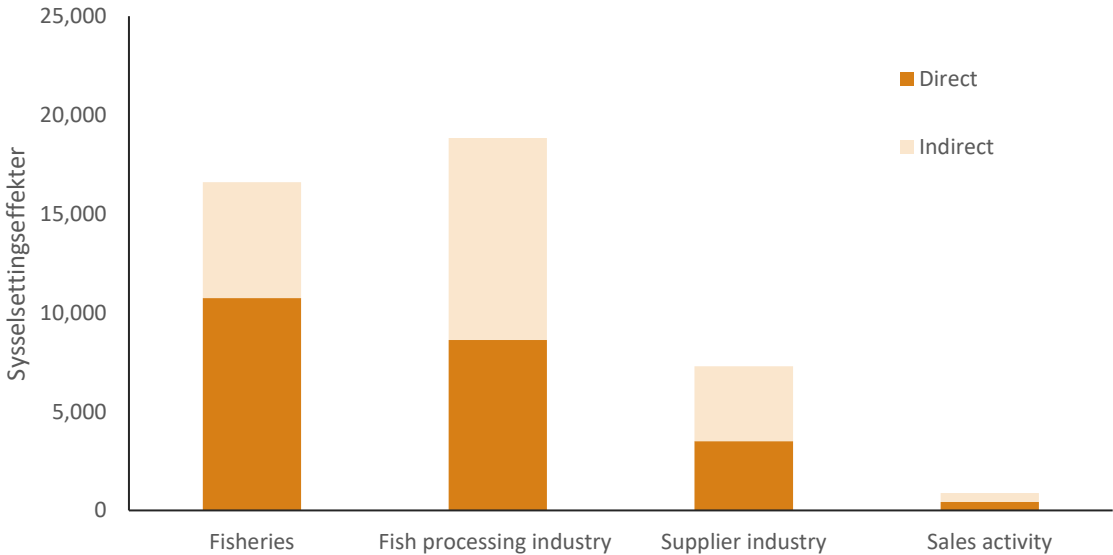


Figure A-5. Total employment impact from fisheries in 2021. Broken down by main group. Source: Menon Economics, Norce



While employment in the fish processing industry is fairly evenly distributed between fisheries (nearly 19,000 employed) and aquaculture (15,500 employed), around 80 per cent of employment in the supplier industry and sales activity is linked to aquaculture. The total employment associated with aquaculture is estimated at 62,500, corresponding to 60 per cent of the seafood industry's total employment impact, while there are an estimated 43,600 people employed through activity associated with fisheries.

We see that the aquaculture industry generates approximately the same number of jobs in indirect as in direct activities. In fisheries, the economic impact is much smaller, where the indirect impact is less than 30 per cent of the direct impact. Fisheries harvest wild resources and therefore buy less of other input factors than the aquaculture and processing industry do.

Activity in the seafood industry generates significant GVA, both in the seafood industry and in other industries through the seafood industry's purchases of goods and services. **Our analyses show that the net value added generated in 2021³ was mor than NOK 120 billion.** This is an increase from 2020 of around NOK 10 billion. The value added was somewhat higher in 2019, but value added in 2021 is at an all-time high. The total tax impact is around NOK 34 billion in 2021, compared with NOK 30 billion in 2020. The increase in value added and tax impact are mainly due to higher sales prices and operating profit in aquaculture companies.

³Net value added means that we take depreciation and write-downs into account in the calculation. Net value added is therefore based on the English EBIT (while GVA corresponds to EBITDA). Net value added is used when talking about GVA in the context of economic impact, in order to distribute economic impact through the suppliers in the best way possible. The figure here includes economic impact.